

# Severn Tidings

Working in partnership for the future of the Severn Estuary

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# Realising our Potential



# Welcome

The Severn Estuary has come under the national spotlight with proposals for renewable energy generation. Now more than ever, is a time for us to pool our knowledge, share views and work together to ensure we are making informed choices about the future management of the Severn Estuary. The Severn Estuary Partnership advocates the need for sustainable use of our estuary for the benefit of society, economy and the environment.



I hope you enjoy reading this bumper issue of Severn Tidings which provides an update of estuary-related news and events.

Chairman of the Severn Estuary Partnership  
Cllr Peter Tyzack

This newsletter is produced by the Severn Estuary Partnership.



Our aim is to bring together people to work in partnership for the future of the Severn Estuary.

For further information on the articles in this newsletter or for any other queries please contact:

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Editor Natasha Barker

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SEP staff at the office in Cardiff. From left to right: Natasha Barker, Ann Jones, Paul Parker and Susie Gardner.

## Realising our Potential

**The Severn Estuary Partnership (SEP) continues to provide services to local authorities and statutory agencies with responsibility for managing the Severn Estuary. Since publication of the Strategy for the Severn Estuary in 2001, the Partnership has strengthened its services and been involved in a range of projects to promote awareness of the estuary.**

Due to increasing interest in SEP services, a new membership scheme is being launched this Spring. Existing partners will be joined by a wide range of other organisations – from companies, consultancies, charities and universities to clubs, societies and individuals with an interest in the future of the estuary. Partners will be joined by 3 tiers of members - organisations, clubs and individuals - in a scheme to broaden interest and involvement in the estuary. Membership offers discounted places at the annual Severn Estuary Forum, regular estuary-related news, access to other networks, contacts and information about the estuary, consultations and events. Full benefits of membership and an application form are provided with this edition of Severn Tidings. Join now for 2008-09!

SEP has a supporting role in decision-making through secretariat services, stakeholder workshops and assisting with consultations and projects. The Environment Agency have appointed the SEP to organise a stakeholder workshop on estuary-related actions for the Severn River Basin District Plan. We are also in discussion with central Governments' Department for Business Enterprise and Regulatory Reform (BERR) and the Welsh Assembly Government (WAG) to encourage wide stakeholder engagement in the Severn Tidal Power Feasibility Studies. Dates of events are provided in Severn Tidings, in SEP Enews and on the SEP website ([www.severnestuary.net/sep/whatsnew](http://www.severnestuary.net/sep/whatsnew)). If you don't already receive SEP e-news please send an email to [severn@cf.ac.uk](mailto:severn@cf.ac.uk) requesting addition to the 'SEP Enews distribution group'.

The Severn Estuary Forum will be taking place in September this year. In 2007 the Forum was a huge success with a full house of people from all around the estuary meeting to discuss current issues. Professor Haslett from Bath Spa University chaired the day and guest speaker Larry Hildebrand from Environment Canada came over from the Bay of Fundy. Larry was proud to represent Fundy's highest tides in the world and share news of their plans to harness tidal energy. There's more about the Forum inside this edition of Severn Tidings.

With the pressure mounting to mitigate and adapt to the predicted impacts of climate change, the Severn Estuary community must respond collectively. Big issues such as the security of energy supply and the renewable energy potential of the Severn are a key driving force for change. The SEP will continue to encourage and support local and regional stakeholders, estuary users and people who live and work here to have a say in decisions about the estuary. It's in everyone's interests to make use of our collective knowledge, with the potential for long term implications from the decisions we make in this generation.

*Natasha Barker, Severn Estuary Partnership Officer, March 2008*  
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# New Membership Scheme -

# join now!

## Severn Estuary

### Partnership

#### Membership Application Form



Membership provides access to information, contacts and events about the Severn Estuary.

The Severn Estuary Partnership is an independent, estuary-wide initiative providing support to many organizations who have responsibilities or interests in the estuary. Its services are supported by regular contributions from local authorities and statutory agencies. A wide range of public and private organisations, local clubs and individuals can benefit from membership.

#### Who Should Join?

- Companies
- Consultancies
- Charities
- Universities
- Local Authorities
- Advisory Bodies
- Government Agencies
- Non Governmental Organisations
- Port / Harbour authorities
- Local Clubs
- User Groups
- Anyone with an interest in the estuary.

A new membership scheme has been launched by SEP to encourage wider use of its services. Membership provides access to information, contacts and events about the Severn Estuary. The SEP provides a wide range of services to support people's interests and activities. It provides a Secretariat - running services, projects and events throughout the year. Membership of the Partnership will keep you informed and improve your ability to make contact with people sharing your interests and meet others with useful information.

#### Membership Types

There are four levels of membership:

- Partner (e.g. regional or national body, local authority, statutory agency, advisory body, relevant authority, port/harbour authority, water company, consultancy, university, industry).
- Organisation member (e.g. regional or national charity, company, university, consultancy).
- Club Member (e.g. local user group, parish/town council, residents association).
- Individual member (e.g. public engaged with river/estuary use).

At different levels of membership, there are benefits including Joint Advisory Committee seat(s), free or discounted places and display space at the annual Severn Estuary Forum, an SEP website link and who's who entry, SEP e-news and Severn Tidings newsletter article space and access to SEP contacts database information and access to networks and information. Further information about the membership scheme and benefits at each level, is available on the application form (enclosed with this newsletter) and from the SEP office or [www.severnestuary.net/sep](http://www.severnestuary.net/sep).

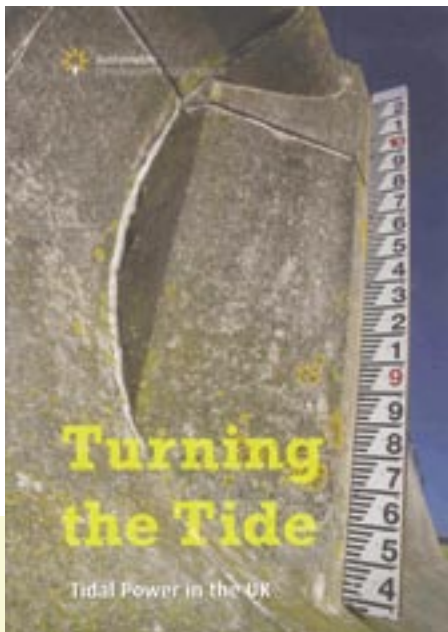
#### *Advantages of membership include:*

- Access to information and contacts
- Sign-posting for plans, projects and management issues
- Guidance on issues and access to relevant data
- Advise on estuary-wide planning issues
- Assistance with consultations, community participation and awareness-raising
- Access to educational material
- Promotional opportunities
- Avenues for collaboration with government bodies, industry, science and the community.
- Ways of meeting Corporate Social Responsibility targets
- Ideas for new projects, funding and collaboration opportunities
- A useful "one-stop-shop" for any query relating to the use and management of the estuary.

# Tidal Energy

## An update on tidal power options for the Severn Estuary

The tidal energy resource in the Severn Estuary provides the largest potential of all the UK's estuaries for renewable electricity generation. In January 2008, Government announced a multi-million pound investment in 2008-09 on a new Feasibility Study of tidal power options for the Severn Estuary. This followed the launch of the Sustainable Development Commission 'Turning the Tide: Tidal Power in the UK'



report in October 2007 which was reported on in the last edition of Severn Tidings.

The Sustainable Development Commission (SDC) outlined the conditions that would need to be met for a tidal power project (such as a Severn Barrage) to meet the principles of sustainable development. Further consideration of options is required to bring previous studies up to date with existing knowledge and legislation. Copies of the SDC report are available on request from the SEP office.

At a House of Commons seminar in November last year, the Energy Minister Malcolm Wicks put into context the SDC's Tidal Power in the UK report. Representatives from the Sustainable Development Commission, Severn Tidal Power Group and Royal Society for the Protection of Birds, spoke to an audience of about 100 ministers, lords, civil servants,

members of the Parliamentary Renewable & Sustainable Energy Group and guests. They heard about the need for climate change action and energy security risks driving the government agenda for renewable energy. Issues surrounding a tidal barrage, tidal lagoons and other options for harnessing the Severn tides were discussed during the 2 hour seminar.

The SEP Joint Advisory Committee were joined by representatives from the Government Department of Business Enterprise and Regulatory Reform (BERR) for our bi-annual meeting in November last year. Gary Shanahan from BERR presented the Government's response to the SDC report and proposed next steps. Decision-makers from around the estuary then considered a joint position statement for the Severn Estuary Partnership in relation to tidal power proposals, as follows.

### Severn Estuary Partnership Joint Advisory Committee Recommendation

## Sustainable Development Commission 'Turning the Tide' Report

*The Severn Estuary Partnership recognises the potential benefits of renewable energy from the Severn Estuary. It acknowledges that the Sustainable Development Commission report is an important step in considering the feasibility of harnessing of tidal power from the Severn Estuary, and welcomes the proposal for a feasibility study. Given the international environmental and economic importance of the estuary, as well as climate change issues, it is essential that all options are appropriately evaluated.*

*The SEP has a unique and strong track record in providing a neutral co-ordination role in the decision-making process; bringing together local authorities, statutory agencies and other organisations with responsibilities for planning and management of estuary resources. It has easy access to the wide range of estuary stakeholders and users who collectively have significant knowledge to offer. No one organisation has all the knowledge, powers and resources to ensure that all uses of the estuary are sustainable - working together is therefore of vital importance. Decisions regarding the future use of the estuary should be made on the basis of sound science, stakeholder and public engagement. SEP exists to encourage information exchange, facilitate discussion and advocate informed decision-making.*

*SEP is able to offer cost effective support towards consultation, information co-ordination and dissemination and provide a watching brief on the process. This would work to the benefit of existing partners, the Sustainable Development Commission and Government. A neutral position will be taken by SEP at all times, informing the decision-making process by pointing out estuary-related issues and acknowledging that partners will each take their own individual positions. SEP will neither be a decision-maker or promoter, but offer avenues for gathering opinion. SEP will encourage questions that need to be asked and help to ensure that relevant parties are involved - in particular seeking to ensure that local and regional stakeholders are fully represented and that the estuary wide perspective is given due weight.*

The Government (BERR) are now leading a two year study looking at the feasibility of tidal power scheme(s) in the Severn Estuary. Before any tidal project(s) could proceed, the feasibility study aims to understand all the environmental, social and economic impacts and then decide whether and, if so, on what terms Government could support a project. The work will be carried out by a cross-Whitehall team led from the Department for Business, Enterprise and Regulatory Reform (BERR), including representatives of the Welsh Assembly Government and the South West Regional Development Agency, taking external advice as necessary and engaging stakeholders and the wider public. The study will look at a range of options for power generation from the Severn Estuary's tidal range, including barrages, lagoons and other technologies. It will include a Strategic Environmental Assessment of plans for generating electricity. If the outcome of the feasibility study is a decision to proceed, extensive and detailed further work would be needed to plan and implement a tidal power project, and secure the regulatory consents that would be required.

The Severn Barrage has been the subject of many talks and debates in recent months, including a two-hour debate in the House of Lords in December 2007. The Government's Feasibility Study will be considering a wide range of tidal power options this year.

The Severn Estuary Partnership has offered to support the Feasibility Study's stakeholder engagement programme to help ensure wide participation in the process.

Further information: [www.severnestuary.net/sep](http://www.severnestuary.net/sep)

- BERR presentation to the Severn Estuary Partnership Joint Advisory Committee, November 2007
- SEP position statement on tidal power.

The Department for Business, Enterprise & Regulatory Reform (BERR) can be contacted by email: [severntidalpowerunit@berr.gsi.gov.uk](mailto:severntidalpowerunit@berr.gsi.gov.uk)  
[www.berr.gov.uk/energy/sources/renewables/explained/wave-tidal/tidal/](http://www.berr.gov.uk/energy/sources/renewables/explained/wave-tidal/tidal/)

## Looking Elsewhere...

The oldest tidal power plant in the world is situated on La Rance estuary in France. Engineers, scientists, politicians and government officials have been visiting France to see how their tidal barrage works. Across the Atlantic, comparisons could also be made with the tidal power potential of the Bay of Fundy which is often quoted to have the highest tidal range in the world. The Canadians' experience from the Annapolis Royal tidal power plant in Nova Scotia and their consideration of tidal power options could offer useful information for the Severn. A Strategic Environmental Assessment of tidal power options for the Bay of Fundy has recently been undertaken. Further information is available through SEP e-news.



Annapolis Royal tidal power scheme, Canada



La Rance tidal power scheme, France

# Pointing the Way for Europe

The European Corepoint Project is in its final stages. This article provides an overview of achievements and where the work points next for coastal management in north-west Europe.

## What's the Point of COREPOINT?



The COREPOINT (Coastal Research for Policy Integration) INTERREG IIIb Project has been an ambitious project, aiming to establish North West Europe as an internationally recognised region of excellence in coastal management. It

has gone about this through building European and local capacity to implement integrated coastal management programmes, providing solutions for coastal problems using best practice approaches, and by developing an integrated coastal information management system for the region.

Tangible outputs include:

- COASTWEB, an exciting and informative 'intelligent' portal on coastal management;
- a revised set of indicators for measuring how well an area is progressing towards Integrated Coastal Zone Management (ICZM);
- ICZM training workshops, including the Severn Estuary (July, 2006) and Pembrokeshire (October, 2007);
- practical guidelines on various topics including Local Information System development, regional governance and Integrated Coastal Zone Management; and
- a position paper on ICZM in North West Europe.

SEP partners are encouraged to use the COREPOINT outputs – so this issue of Severn Tidings features further information about the work.

At the heart of the COREPOINT project have been a series of academic & practitioner partnerships, or 'Local Expert Couplets'. They have operated at the regional and local levels, promoting knowledge transfer and producing a range of outputs relevant to local needs. The Severn Estuary Partnership (SEP) along with Cardiff University has been one of these

couplets, with both organisations having benefited from their involvement in the project. For SEP, COREPOINT helped increase knowledge and awareness of coastal issues and best practice management approaches - through an Expert Surgery in Cardiff Bay and an ICZM Training course in Clevedon (Summer, 2005). More recently, COREPOINT has facilitated the establishment of the Severn Estuary Climate Change Research Advisory Group; hosted workshops on coastal information requirements associated with Strategic Environmental Assessment (SEA) of local development plans/documents; and produced the useful and popular maritime heritage education pack 'Stories of the Severn Sea'. Further details on some of these activities and outputs are provided in the other articles within this COREPOINT feature.

European ICZM projects are frequently criticised for creating a culture of project-based management with outputs 'frozen' in time and aspirations raised unrealistically. It is hoped this will not be the case for COREPOINT. The COREPOINT partners are discussing project outputs and outcomes with other European networks and projects to share lessons learnt.

The COREPOINT partners have recently been awarded another INTERREG project which will involve the Severn. The new project 'IMCORE' (Integrated Management for Coastal Research) will help to ensure that we build on the COREPOINT project achievements so that we remain at the cutting edge of ICZM in North West Europe.

Further reading/information on COREPOINT and COASTWEB, see <http://corepoint.ucc.ie> and [www.coastweb.info](http://www.coastweb.info) or contact Dr. Rhoda Ballinger at Cardiff University: 02920 76671 [ballingerrc@cardiff.ac.uk](mailto:ballingerrc@cardiff.ac.uk)



# Development of the Severn Estuary Climate Change Research Initiative

The Severn Estuary Strategy (2001) highlighted the need for sound science for estuary management and included a specific policy on the need for improved science-policy integration. In this context, the COREPOINT project enabled the initiation of a programme of work to facilitate improved communication of Severn Estuary science amongst the research community, policy makers and practitioners. Informed by a review of the experiences of other coastal partnerships, COREPOINT has brought researchers, policy-makers and practitioners closer together to discuss their respective needs as well as their opportunities for collaboration in the context of climate change on the Estuary.

The discussions to date have involved a workshop in Bristol in January (07), a break-out session at the Severn Estuary Forum in June (07) and workshop in Cardiff in December (07). These have enabled a wide range of stakeholders to express their ideas on the ways in which a dedicated research advisory group on climate change, the Severn Estuary Climate Change Research Advisory Group (SECCRAG), should operate. They have also allowed researchers, policy-makers and practitioners alike to provide suggestions for the Group's research priorities. These include:

- downscaling of climate change assessments;
- assessing the state of the estuary;
- social & economic assessment of impacts;
- mapping of assets at risk;
- implications for coastal risk management;
- identification of research inputs for estuary-wide, local authority and other plans.

The discussions have also highlighted the need for SECCRAG to consider:

- how to provide a 'bridge' between strategic & tactical research;
- monitoring baseline indicators for future climate change;
- signposting existing & future research;



*Severn Estuary Climate Change Research Advisory Group, December 2007*



*Workshop at the Severn Estuary Forum, June 2007*

- increasing accessibility of & trust in existing research and the research community;
- translating research into plain and simple language.

The discussions have revealed a surprisingly wide range of relevant, current and former research activity. This research needs to be harnessed and brought together, not only to inform further scientific advances, but also to inform policy development for the Estuary. A growing number of relevant contacts have been brought together alongside a research citation database. It includes several hundred relevant technical and academic references and lists relevant Severn Estuary models. It is hoped this will lead to a better informed, multidisciplinary, policy-led approach to decision-making on the Severn. The story so far has certainly shown that there appears to be considerable enthusiasm for the formation of an estuary-wide research advisory group related to climate change. If you would like further information on this initiative or would like to be involved please contact Joe Green (GreenJ@cf.ac.uk) or Rhoda Ballinger (ballingerrc@cf.ac.uk)

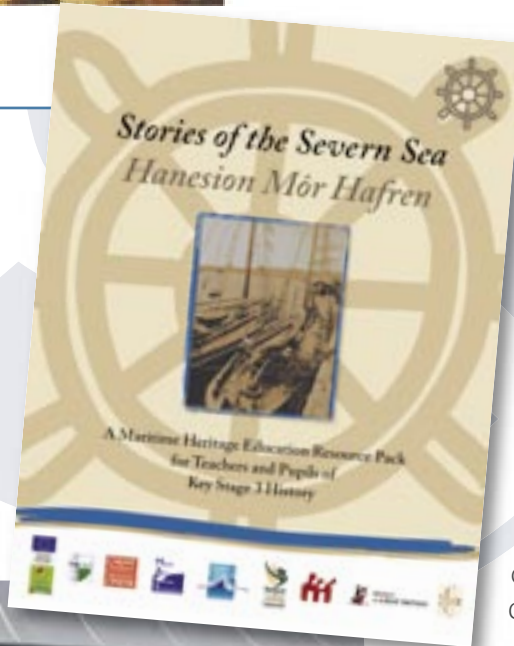
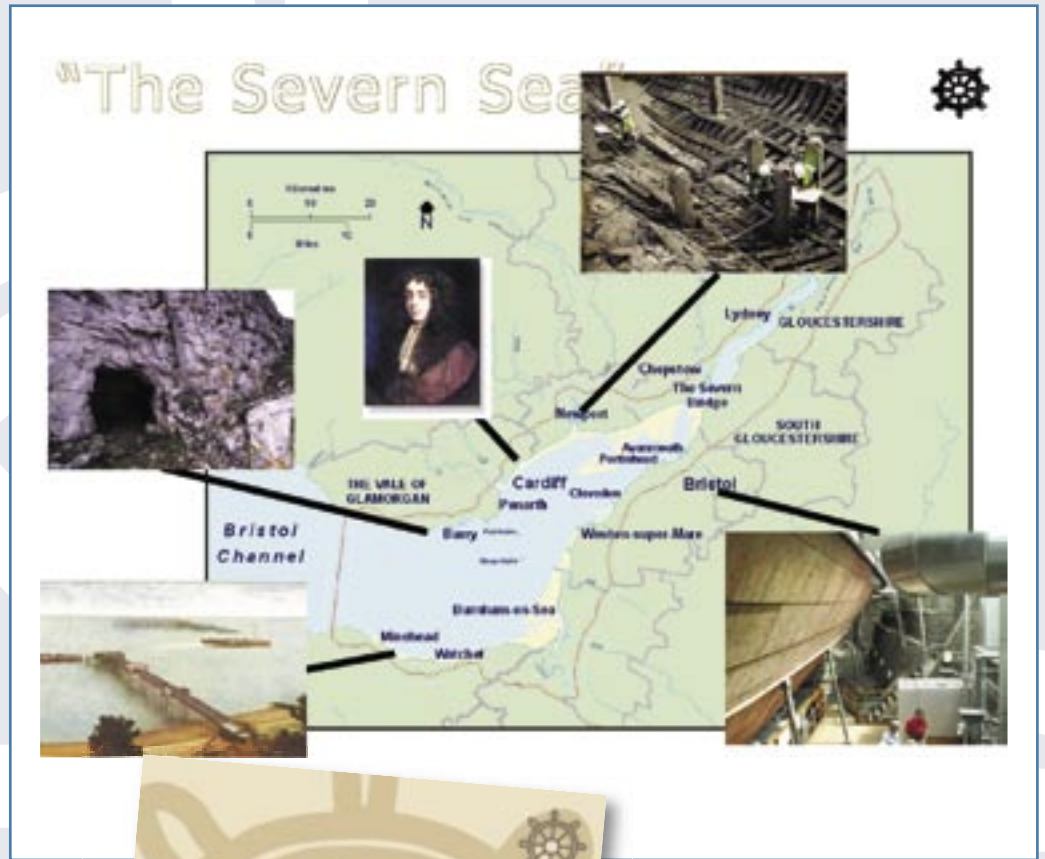
**SECCRAG reports are available on the SEP website:**  
<http://www.severnestuary.net/sep/publications/workshopreports.html>.

# “Stories of the Severn Sea”

The Maritime Heritage Education Resource Pack, developed with COREPOINT funding, was compiled with support from local schools and museums and is aimed at teachers and students of Key Stage 3 History in England and Wales.

The bilingual pack (English and Welsh) combines an overview of the Severn Estuary's fascinating maritime heritage with particular emphasis placed upon the local history of Barry, Cardiff, Newport, Bristol and Watchet. The pack uses local examples from around the Severn Estuary to explore topics such as shipwrecks, smuggling, piracy, immigration and port development.

It is divided into a number of sections, each with National Curriculum information for teachers, definitions of terms, local case studies, student activities and web links. It is also supported by a CD Rom and website. In addition to the paper-based pack, a CD ROM and web page support classroom activities, with lesson plans and activity sheets.



It was developed in partnership with a number of voluntary and professional organisations, including:

The Marine and Coastal Environment Group (MACE) of Cardiff University; Cork University; The Severn Estuary Partnership; National Museum and Galleries of Wales; SS Great Britain Trust in Association with Destination Bristol; Newport Medieval Ship Project; Watchet Boat Museum; Bettws High School, Gwent, South Wales; Ysgol Gyfun Glantaf, Cardiff, South Wales.

Copies of the pack have been distributed to secondary schools surrounding the Estuary.

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<http://www.earth.cf.ac.uk/research/mace/corepointheritage.shtml>



The launch of the Heritage Pack on Clevedon Pier during the Severn Estuary Forum, 2007.






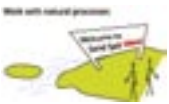
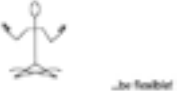
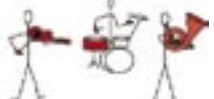


# COREPOINT and the European Principles of Integrated Coastal Zone Management

The COREPOINT Project has promoted the European Principles of Integrated Coastal Zone Management (ICZM) and undertaken research to see how these principles are being interpreted and applied across the local case studies, including the Severn Estuary. Ideally, everyone who works at the coast should take these principles of good governance into account. In practice, however, the COREPOINT results show a rather patchy adherence to some principles, with principles 1, 2 and 4 providing the

biggest challenges. COREPOINT partners consider that this may result from the lack of statutory backing to ICZM and the significant land-sea divide between the management and planning of terrestrial and offshore areas in most North West European countries.

The following table summarises the key features associated with each ICZM principle. Consider each principle in turn and reflect on how well your organisation

and the organisations around the Severn, including SEP, are addressing each one. The COREPOINT study showed that the Severn Estuary is doing reasonably well compared with many other areas in North West Europe. However, there is room for improvement. If you have any ideas on how we can improve our performance on the Severn, please let us know (Severn@cardiff.ac.uk).

	<i>Name of Principle</i>	<i>Picture</i>	<i>This means that we need to make sure that management, planning and policy:</i>
1	<b>Take a broad perspective</b>		<ul style="list-style-type: none"> <li>● address linkages between issues, sectors and neighbouring geographical areas</li> <li>● provide solutions which are designed within the context of other issues and management</li> </ul>
2	<b>Long term perspective</b>		<ul style="list-style-type: none"> <li>● take a long-term view of coastal processes and management</li> <li>● take account of the Precautionary Principle</li> <li>● look after the needs of both the present and future generations</li> </ul>
3	<b>Local specificity</b>		<ul style="list-style-type: none"> <li>● develop local, specific solutions which are designed to reflect local conditions and to solve local needs</li> <li>● encourage flexibility to enable approaches to be tailored to local needs</li> </ul>
4	<b>Working with natural processes</b>		<ul style="list-style-type: none"> <li>● 'work with' natural processes</li> <li>● respect the carrying capacity of ecosystems</li> <li>● provide for long-term sustainable human use of the coast</li> </ul>
5	<b>Adaptive Management</b>		<ul style="list-style-type: none"> <li>● are based on sound evidence /science</li> <li>● learn from and adjust to evolving issues and knowledge base</li> <li>● are reiterative, long-term processes</li> </ul>
6	<b>Combination of instruments</b>		<ul style="list-style-type: none"> <li>● do NOT rely on one approach or tool for managing coastal areas</li> <li>● Are inventive and use a range of approaches and tools to encourage coordination</li> </ul>
7	<b>Support &amp; involvement of all stakeholders</b>		<ul style="list-style-type: none"> <li>● involve the support of relevant (regional and local) administrative bodies</li> <li>● require establishment/maintenance of appropriate links between relevant administrative bodies</li> <li>● aims to improve co-ordination between policies through a variety of approaches including partnerships with and between regional and local authorities</li> </ul>
8	<b>Participatory approach</b>		<ul style="list-style-type: none"> <li>● involve all relevant interests (e.g. economic, social, residents' representatives, NGOs and business) in the management process</li> <li>● promotes shared responsibility for management</li> <li>● encourage harnessing of local knowledge as well as the building and strengthening of commitment and shared responsibility for coastal management</li> </ul>

# Cardiff Bay: Harbour Festival



*R.V. Guiding Light the Cardiff University research vessel.*

Involvement in the Cardiff Harbour festival put the Severn Estuary Partnership (SEP) in the public domain last August. SEP staff Paul Parker & Steve Knowles set up display material and handed out information (including copies of Severn Tidings) alongside Cardiff University's marquee. A representative of the Partnership was on hand to answer any questions and raise awareness of the work of the SEP to the public attending the festival.

Perhaps one of the highlights, was the opportunity to visit Cardiff University's research vessel R.V. Guiding Light, which was moored alongside two tall ships and in the company of the Penarth Inshore Life Boat. Onboard, underwater cameras provided views of the bay floor and at times two eels were present, scrapping

over the 'bait' strapped to the side of the camera mount. There was also a hands on demonstration of a sediment grab, with the youngsters being able to sample the bay floor and if lucky, view the worms that live there.

Towards the end of the day a dramatic display by the Seaking helicopter, Rescue 169 from RAF Chivenor, in conjunction with Penarth RNLI, offered visitors a visual reminder of the work the RNLI do and the dangers of the water.

The day was of great value to the SEP with many members of the public taking the time to discuss current issues. It was a good opportunity to raise the partnerships



profile in the local community and - judging by emails received shortly after the event - the locals appreciated SEP's involvement with the festival. Numerous copies of the Severn Tidings newsletter were taken from the display stand and several people asked to be kept updated of developments in and around the Severn Estuary. This can be achieved through both our website, e-news and biannual newsletters.

# Promoting the Severn Estuary

Work has begun on a tourism & marketing strategy for the Severn Estuary. Following the success of the Severn Wonders festival of events in 2006, the Severn Estuary Partnership are considering how to make the most of the 'Severn Wonders' brand in future.

The Severn Estuary and its hinterland have so much to offer, but initial research has shown that the estuary is not well promoted in tourism circles. We have found that each local authority and tourism agency has very different approaches to the inclusion (or not!) of information about the estuary in their marketing literature. More coherent and stronger communication about the value of the Severn Estuary is needed. The Severn Wonders brand could be used to help attract visitors, promote and strengthen tourism around the estuary, such as through a 'quality tourism' label. Other ideas include the establishment of a Severn Estuary Tourism Council which would bring together representatives of organisations such as South West Tourism, Destination Bristol and Wales Tourism with local authority tourism officers and businesses to work together on new

approaches to promoting the estuary. There is thought to be significant potential to make links with existing initiatives, such as the Green Tourism Business Scheme which could include further development of the 'Severn Estuary Local Produce' guide. Other existing sites, facilities, destinations and organisations could be encouraged to develop their estuary theme – the Wildfowl & Wetlands Trust, Severn Bridges Visitor Centre, Newport Wetlands National Nature Reserve, the Severn Way walk, the Severn Bore, Clevedon and Penarth piers, boat operators etc. Together, the potential for promoting the Severn Estuary is huge! The Severn Estuary Partnership are therefore initiating discussions with key people in the tourism industry to see if there is a role for us to promote collaboration – and fulfil the potential there appears to be!

## Severn Wonders



## A round-up of key policy developments affecting management of the Severn Estuary.

### Marine Bill – launch Spring 2008

Governments' Department for the Environment, Food & Rural Affairs (Defra) consulted on an ICZM Strategy and Marine Bill White Paper last year (2007). The Partnership responded to both and a copy of the SEP responses can be found on the partnerships website: <http://www.severnestuary.net/sep/whatsnew/consultations.html>. The draft Marine Bill was launched on 3 April 2008 and it is hoped that the Bill will enter Parliament later this year. It is likely to introduce a new UK-wide system of marine planning, streamline licensing for marine developments, improve measures to protect the marine environment, improve the management of fisheries, and set up a new Marine Management Organisation.

### River Basin Planning – Environment Agency estuary workshop

The Environment Agency has the responsibility in the UK for delivering on the European Water Framework Directive. It establishes better ways of protecting and improving the water environment through river basin planning. It is now in the process of preparing a River Basin Management Plan for the Severn River Basin District, which is due to come into effect in 2009. A discussion document called River Basin Planning: Working Together was issued by the Environment Agency last year and a summary of the consultation is available from their website: [www.environment-agency.gov.uk/wfd](http://www.environment-agency.gov.uk/wfd). More recently - early 2008, stakeholder workshops were held around the upper catchment. The Environment Agency is now working with the Severn Estuary Partnership to host a River Basin Planning workshop to focus specifically on estuary-related issues. Contact the SEP office for details.



### Candidate Special Area of Conservation (cSAC) Designation

The Countryside Council for Wales and Natural England advised the Welsh Assembly and UK Governments that the Severn Estuary qualifies for designation as a Special Area of Conservation (SAC) under the 1992 Habitats and Species Directive (Council Directive 92/43/EEC). In August 2007 English and Welsh Ministers accepted that recommendation and submitted the Severn Estuary to the European Commission as a candidate SAC. The site will now be considered for adoption by the EC and if adopted will subsequently be formally designated. The Severn Estuary would then join thousands of other sites across Europe making up the European Union's 'Natura 2000' network of sites designated for their international importance to the conservation of biodiversity.

Part of the Severn Estuary is already designated under the 1979 EC Birds Directive as a Special Protection Area (SPA), reflecting its international importance for conservation of a number of rare and migratory bird species. The site is also listed under the 1971 Convention on Wetlands of International Importance especially as a Waterfowl Habitat (the 'Ramsar' or Wetlands Convention) as one of a series of globally important wetland sites. The candidate SAC is protected under the Conservation (Natural Habitats, &c.) Regulations 1994, as amended.

The upper extent of the cSAC designation is on the River Severn at The Noose, Frampton on Severn and Awre. The lower extent of the designation is Lavernock Point, near Penarth in Wales and just west of Hinkley Point in England.

### Shoreline Management Plan – Round 2

Government's Department for Environment, Food and Rural Affairs (Defra) have placed targets on local authorities and the Environment Agency to produce Shoreline Management Plans (SMP). The Government spends large sums each year managing the risk from coastal flooding and erosion. In the past, development on the coast took place with less knowledge of natural processes and the risks associated with changing natural processes of erosion and accretion, which were sometimes modified in a less than optimal way. Climate change and sea level rise pose significant challenges. The operating authorities must look at options and avoid burdening future generations with the cost of maintaining unsuitable defences. They therefore aim to develop responses that are appropriate to areas at risk and wherever possible achieve sustainability through working with, rather than against, coastal processes.

In the past ten years significant progress has been made through the production of Shoreline Management Plans around the UK coastline, including the Severn Estuary. SMPs present a long term policy framework identifying preferred options for improving, maintaining or retreating existing coastal defences. Following a review of the strengths and weaknesses of the first generation of SMPs, further research was needed into how the coast would evolve. Extensive guidance is now being used by the Severn Estuary Coastal Group who have recently started work on the SMP2 for the Severn Estuary. The Group is Chaired by David Harris from Monmouthshire County Council, with Secretariat Services provided by the Severn Estuary Partnership. For further information see [www.defra.gov.uk/environ/fcd/policy/smp.htm](http://www.defra.gov.uk/environ/fcd/policy/smp.htm) and [www.severnestuary.net/secg](http://www.severnestuary.net/secg). The Environment Agency have produced a **Coastal Habitat Management Plan (CHAMP)** which will also help to inform development of the SMP. Copies of the CHAMP are available from the SEP office.

# New deep sea container terminal - The Port of Bristol

The Bristol Port Company's plans are progressing for a new deep water container terminal in the Severn Estuary at the site of a former oil jetty and terminal at Avonmouth Docks. The new terminal will service existing large container ships and future generations of Ultra-Large Container Ships, providing direct access to the national motorway and rail networks. Construction of the terminal will include the redevelopment and reclamation of an area of land for container handling and storage facilities; the construction of a 1.2 km quay wall and 600m breakwater; and associated dredging to deepen and widen the existing approach channel and to create deep water berths and a turning area for the manoeuvring of these vessels. Information necessary for the completion of an Environmental Impact Assessment is being collected and the Port and its consultants continue to meet with regulators and other key stakeholders.

The Environmental Statement is due to be submitted to the Department for Transport in Summer 2008, which will be followed by a period of formal public consultation. A decision on the scheme is expected in mid 2009. For further information please see The Bristol Port Company Website <http://www.bristolport.co.uk/> or contact [deepsea@bristolport.co.uk](mailto:deepsea@bristolport.co.uk).



## Coastal access - South Monmouthshire



The Welsh Assembly Government has a vision of improved access to and along the coast of Wales. Over the next five years improved coastal access routes are being planned to provide more opportunities for people of all ages to enjoy the coast. All the Welsh local authorities along the Severn Estuary are working, with the Countryside Council for Wales, to deliver coastal access improvements and eventually a Wales Coastal Path.

Newport City Council and Monmouthshire County Council (MCC) are working in partnership and at the end of the first year of the programme there has been considerable progress. The Coastal Ways Officer, Helen Howlett, based with MCC, has held public consultation events across South Monmouthshire. Key partners and the public were involved and useful feedback obtained about current usage and potential interest in coastal access issues. The results will help inform the local coastal access improvement programme which is under preparation. For more details, including volunteering opportunities, contact Helen on **01633 644850 or 232164**; e-mail [helenhowlett@monmouthshire.gov.uk](mailto:helenhowlett@monmouthshire.gov.uk) or [Helen.Howlett@newport.gov.uk](mailto:Helen.Howlett@newport.gov.uk) or view [www.monmouthshire.gov.uk/countryside](http://www.monmouthshire.gov.uk/countryside)

# 2nd Severn Estuary Forum – a full house!

## Working Together: The Future of the Severn Estuary

The 2nd Severn Estuary Forum was held in June 2007. It was a full house with 140 delegates given the opportunity to discuss issues affecting the future of the Severn Estuary. This 2nd Forum was chaired by Professor Simon Haslett with an excellent range of presentations. The conference included sessions on cultural & natural heritage, planning & climate change and tidal energy. An infrastructure and industry exhibition was a new dimension to the Forum. Following the conference, an evening reception was held on Clevedon Pier. It was an informative and exciting day for all.

Keynote speaker Larry Hildebrand from Environment Canada talked under the theme of tidal 'bores'. Larry compared the Severn with the Bay of Fundy and suggested ways that each estuary could learn from one another. He explained how a tidal barrage in the Bay of Fundy had been rejected and how other projects were now being considered. Larry's speech was followed by presentations from statutory nature conservation bodies for England & Wales, who provided an overview of the natural heritage of the Severn Estuary.

After lunch and an opportunity for informal networking,



talks on planning and climate change offered an insight into practical measures being taken to address strategic planning issues, particularly in response to climate change. Following another short informal networking opportunity came the last set of presentations on tidal energy. Consultants for the Sustainable Development Commission (SDC) presented information on options for generating tidal energy as well specific Severn Barrage options.

Short presentations exploring industry and infrastructure heritage around the Severn, including the launch of a

new maritime heritage pack for schools concluded the conference.

After the formal proceedings, 40 delegates made the short stroll down to Clevedon Pier where the Severn Estuary Partnership hosted a social event. People were invited to listen to a live

jazz band while enjoying a glass of wine and some local cheese. Dr Chris Wooldridge (who chaired the 1st Severn Estuary Forum in 2006) introduced a range of speeches from local people to highlight estuary interest and local knowledge. During the evening a Severn Estuary Partnership plaque was unveiled on Clevedon pier.

Once again feedback from the event has suggested that it was a great success, with delegates commenting on the usefulness of the speakers and the relevance of topic areas discussed. Plans are in progress for a similar event in 2008, taking into consideration feedback from this year's event.

For further information please visit the Forum pages on our website (<http://www.severnestuary.net/sep/forum.html>) or contact the SEP office.





The SEP Officer Natasha Barker took a sabbatical last summer to complete her Winston Churchill Fellowship on 'Managing Tidal Change.' This took her to the Bay of Fundy, Canada in 2006 and the Penzhinskaya Guba estuary in northern Kamchatka, Russia in 2007. Natasha was awarded a Churchill Fellowship under the 'Water Workers' category to look at how estuaries with high tidal ranges are managed. Working for the Severn Estuary Partnership, commonly known to have the 2nd highest tidal range in the world, was the starting point for looking at other estuaries with huge tides. Across the Atlantic, the Bay of Fundy is known to have the highest tidal range in the world. On the opposite side of the Earth, the remote Russian Penzhinskaya Guba, experiences tidal ranges similar to the Severn. The three estuaries share dynamic tides but extreme differences in culture, population and wilderness. Natasha describes her fellowship experience in this article.

# High Tidings

## Managing Huge Tides in Three Continents

Coastal shorelines, estuaries and tidal life have fascinated me from a young age. Millions of people live near estuaries for resources, trade and leisure – but need to carefully co-exist with the rich natural environment. The potential for conflict between man and nature is high around developed estuaries like the Severn Estuary, so through my fellowship I explored how people live with the tides around other estuaries.

Three themes were considered across the three estuaries in the fellowship:

1. public awareness and marketing the tide for tourism
2. flood risk planning
3. renewable tidal energy potential

Meeting people with similar interests around the Bay of Fundy was wonderful – we found so much common ground. Just like the Severn, there is a history of land reclamation with shoreline defences and a wild bore harnessed by surfers. Canada is a few years ahead of the UK with their legislation for ocean & coastal management, so I gained an insight to how our proposed UK Marine Bill might look. We hosted a Canadian speaker at the annual Severn Estuary Forum conference after my visit, which

has triggered a lot of information exchange over proposals for tidal energy generation. Tourism experts are keen to share their experience on promoting the tide - the Fundy message that you can 'walk on the ocean floor' is one we could also do here! Spending time around the Bay of Fundy was excellent experience for my professional development.

As the fellowship was my 'opportunity of a lifetime' I wanted it to include something unusual and of personal significance. My Russian name is a coincidence - being born soon after my mother read Tolstoy's War & Peace - so I've never set out to see if I have Russian origins. However, this trip was an exploration into the origins of human society. Via the internet I discovered a Russian-sounding estuary with a high tidal range similar to the Severn. Searching a world map for the Penzhinskaya Guba unfolded the beginning of 18 months preparation to reach one of the remotest parts of the world. From the capital city of Kamchatka in Far East Russia, my journey involved unpredictable travel by plane, helicopter, barge and over land to reach Kamenskoye and Manily on the Penzhinskaya Guba. I spent ten days there visiting families, fishermen, barge operators, local government, police and port officials. They helped me to see an estuary occupied by less than 1% of the population of the Severn Estuary or Bay of Fundy in an untamed land dominated by the tide. People rely on the tide for transport, trade and fishing - which are essential to survive the harsh winter months. There was no sign of a tidal bore or prospects for tidal tourism - this was a depopulating area suffering from reduced government

investment since the cold-war days. Even here though, plans have been sketched-out for a tidal barrage. It was a fascinating insight into the way people live more closely with the tide in a remote wilderness. Returning on an opportune ship with 5 days through the Sea of Okhotsk, immersed in Russian perspectives of life, completed a trip I had barely imagined possible.



*I have now co-authored reports with scientists in the Bay of Fundy and Penzhinskaya Guba, including recommendations for future collaboration with people around the Severn Estuary. I'm hoping to make a short film about my fellowship – particularly to capture the exploration to such a remote estuary in Russia.*

*The expression 'time and tides wait for no man' has taken on new meaning as a result of my fellowship. My time in Canada and Russia was rewarding both professionally and personally.*

**Natasha is due to formally receive her fellowship award in June 2008. The full set of 'Managing Tidal Change' reports are available from the SEP website (<http://www.severn-estuary.net/sep/publications/otherpubs.html>) or can be requested in hard copy from Natasha by email: [natasha.barker@bopenworld.com](mailto:natasha.barker@bopenworld.com)).**



# News in Brief...

## Estuary Round-up

### Partnership News

SEP staff continue to work on delivering the SEP Business Plan 2006-09 and the Annual Report & Action Plan which illustrate how we are implementing the Strategy for the Severn Estuary (2001). The SEP Management Group oversee the work of the partnership on a quarterly basis. Most of the key estuary stakeholders get together twice per year on the Estuary Groups Day. The Joint Advisory Committee meeting on these days provides a very informative round-up of estuary-related policy developments, consultations and news from other estuary-related groups. The annual Severn Estuary Forum is now established as the major annual event in our calendar, with plans for the next Forum now underway for September 2008. SEP's services to encourage information exchange and networking are increasingly in demand, particularly with the renewed focus on tidal energy options. Local authorities and statutory agencies continue to provide most of the funding for SEP, with Cardiff University providing in-kind support by hosting the office. Mutual benefits arise through European project collaboration such as the COREPOINT and IMCORE project featured in this edition of Severn Tidings. The new membership scheme will continue to strengthen and broaden the remit of SEP and use of its service to promote a holistic, estuary-wide perspective for the Severn.

### Les Esturiales

SEP have been hosting the Secretariat for the European Esturiales network of local estuarine authorities since early 2006.

Although this was only for a 2 year term, the partners have asked SEP to continue to host the network throughout 2008. During our time as Secretariat we have hosted bureau meetings and conferences with partners in Poland and Portugal as well as at home here on the Severn. As a result, we are participating in a European project proposal called 'DeltaNet' which could lead to strengthening and widening the number of Esturiales partners over the next few years. Meanwhile, SEP are refreshing the network with the website, newsletter and our 2008 Forum will take place alongside the Esturiales annual conference this year in September.

### SECG update

SEP provide the Secretariat for the Severn Estuary Coastal Group (SECG) of local authorities and statutory agencies concerned with overseeing development and implementation of the Severn Estuary Shoreline Management Plan. The group meets twice/year on the Estuary Groups Day. During 2008-09 more regular meetings of a sub-group are taking place to work on the second generation Shoreline Management Plan, as featured in this edition of Severn Tidings.

### ASERA update

The Association of Severn Estuary Relevant Authorities (ASERA) is a grouping of the statutory organisations around the estuary that have come together to raise awareness of the Severn Estuary European Marine Site. They help to ensure that activities around the estuary are carried out in a way sympathetic to the nature conservation objectives.

ASERA has produced the first in a suite of guidance notes to help organisations and users of the estuary undertake activities in a way that helps protect the designated habitats and species of the estuary and comply with legislation.

The first guidance note 'Archaeological Activities and the Severn Estuary European Marine Site' is available on the ASERA web site ([www.severnestuary.net/asera](http://www.severnestuary.net/asera)) and in hard copy on request from the SEP office. Other guidance notes that will follow include 'events and festivals,' 'managing unauthorised waste,' and 'collecting scientific data'. ASERA has also produced a 'Communication Strategy' to help statutory organisations and user groups around the estuary provide a consistent message when raising awareness of the site's nature conservation designations. This is also available on the ASERA web site ([www.severnestuary.net/asera](http://www.severnestuary.net/asera)).

The ASERA group are very grateful for the work Steve Knowles put into the group during his time working for the SEP. Steve has moved onto a full time position in Cardiff Council. SEP will soon be recruiting a new Severn Estuary European Marine Site officer to work for ASERA.

### New Publication

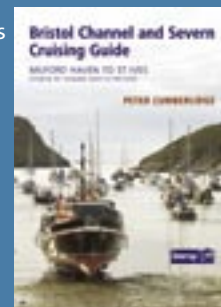
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*Mae Partneriaeth Mor Hafren yn cynnwys awdurdodau lleol, mudiadau eraill a defnyddwyr yr aber, sy'n gweithio gyda'i gilydd i sicrhau bod yr aber yn aros yn gyfleuster gwerthfawr iawn trwy'r 21ain ganrif a thu hwnt.*

The Severn Estuary Partnership involves local authorities, other organisations and users of the estuary working together to ensure that the estuary remains a resource of great value throughout the 21st century.

## Coming up...

Estuary Groups Day & SEP Advisory Committee	20th May 2008
European Maritime Day	20th May 2008
Severn Estuary Forum & Esturiales Conference	18-19th Sept 2008