



Torbay inlet, Western Australia

# 1 | Partnerships and Collaboration

Do we need a whole of river basin stakeholder process to achieve sustainable river systems? Most people in the business of managing and protecting rivers would say ‘yes, we do’, and then they might refer to the many difficulties associated with achieving this goal. Further, they might suggest that development and maintenance of solid partnerships and collaborations with key stakeholders who have an interest, responsibility or capacities (Webb & Curtis, 2006) is one of the most fundamental challenges to achieving long-term sustainable management of river systems. Ensuring broad stakeholder engagement in river system management requires innovation, time and resources as well as ‘knowledge of stakeholder engagement and facilitation tools, methods and approaches’ (Thomson & Allison, 2006).

It is not enough just to have partnerships among stakeholders in a watershed. This must be followed up with active participation and action by each group. Active engagement between various stakeholders requires negotiation between groups that have ‘competing value orientations’ (Webb & Curtis, 2006).

Active participation of various stakeholder groups contributes to best practice management of river systems as it facilitates effective information sharing, coordination and practical support, needs assessments and resource allocation (Koehn et al. 2001). Collaboration between stakeholders also facilitates a multi-disciplinary approach, and such diversity in expertise strengthens restoration and management projects (Lovett & Edgar, 2002).

In the case studies, achieving exceptional partnerships and collaboration started with the initial engagement of stakeholders, followed by an agreed governance structure, successful resourcing of governance and core activities, and maintaining

healthy engagement of key organisations. Ongoing collaboration has also succeeded when rules of engagement and mechanisms for dealing with conflict have been agreed upon among the players.

In the cases of the Mersey River (United Kingdom), Siuslaw Watershed (Oregon, USA) and Torbay Catchment in Western Australia, the environmental degradations and associated problems were large and serious, and so it is for many rivers today. These three rivers and watersheds respectively took some imaginative and bold steps to attract a broad range of important and influential stakeholder groups from government and environmental agencies to industry, corporate representatives and communities affected on the ground. In the case of all three examples, all stakeholder groups were part of the governance structure of the organisations that managed the process, and therefore contributed substantial funding directly toward completing the projects.

## Good stakeholder engagement is:

1. purposeful and clearly articulated, so that stakeholders are clear what they are signing up to
2. mutually beneficial, shared and fair, so that stakeholders know ‘what’s in it for them’
3. open, trustworthy and negotiable, so that stakeholders feel respected
4. strategic, always leveraging resources and with an eye on the future
5. sustainable, reducing demand on resources, so that stakeholders will not be over-burdened.

Adapted from Thomson & Allison, 2006



The Mersey River at Liverpool joining the Irish Sea

## Mersey River, United Kingdom



Industrialisation left a legacy of heavy pollution in the Mersey Basin. Up until the 1990s, the rivers and canals within the basin were major conduits for removing and transporting both industrial and untreated domestic waste (Wright & Bendell, 2004). Many of the watercourses were heavily modified or damaged and water quality became too poor to support the marine flora and fauna that once thrived in the watershed. The North-West of England was the worst affected area during the industrial era. The Mersey River was 'dirty and lifeless', and its estuary was widely regarded as the most polluted in Europe.

Environment Minister of the time, Michael Heseltine, denounced the state of the Mersey River as 'a disgrace to civilised society', and he became a key driver in establishing the Mersey Basin Campaign in 1985. The Campaign undertook urgent restoration works to specifically tackle water quality and streamside regeneration.

The key ingredient was strong public sector involvement, but involvement of the other partners was still crucial.

The river's extreme poor condition and the associated disgrace and embarrassment may have triggered the initial 'emergency' response, but Deputy Chief Executive of the Mersey Basin Campaign, Mark Turner, explains that the Mersey Basin Campaign is a small organisation with a very large program, and working in partnership with other organisations is vital to achieving significant progress. For example, the creation of the Speke & Garston Coastal Reserve in Liverpool received funding from the European Union INTERREG program, and brought together firms from the UK, Germany and the Netherlands who contributed resources such as land, funding, legal advice and project management expertise.

The campaign credits the healthy relationships among the different public, private and voluntary sector partners and sponsors as a 'fundamental ingredient' of successes to date. Indeed, the strength of relationships with partners in the private sector, such as United Utilities and Shell UK, was recognised by the Northwest Business Insider (2004) as 'one of the most business friendly environmental rehabilitation efforts in Europe'.

**These new unusual collaborations led to unheralded improvements to water infrastructure, major upgrades to sewage infrastructure and the introduction and uptake of very strict environmental legislation.**

Many rivers in the Mersey Basin are now cleaner than they have been since the end of the industrial revolution. Porpoises, grey seals and fish such as salmon, trout, lamprey and dace have returned to formerly polluted stretches of the river, and juvenile salmon have been observed in upper reaches of the river for the first time in living memory. These successes helped to generate a wider range of participants and partnerships, and became a catalyst for new programs in sustainable waterside regeneration and even wider urban regeneration. The strength of the partnerships in the Mersey Basin Campaign has ensured a continuing active involvement of public, private and voluntary sectors. This is evidenced today in the depth of new initiatives throughout the basin, on the campaign website, through international conferences and the annual Mersey Basin Week.

## Lessons learnt

Rehabilitating the Mersey River watershed has proved to be a vast and complex project where a great number of lessons were learnt. Mark Turner provides some insights:

### Partnerships

As the task of cleaning the Mersey Basin was beyond the scope of any one organisation or sector, a good breadth of organisations and disciplines had to be brought to the table from the very beginning.

### Resources

The clean-up of the Mersey Basin has required the investment of large sums of money. The regional water company, United Utilities, has made investments over £8 billion since 1990 into the region's wastewater facilities through its Asset Management Programs (AMP).

### Flexible approach

The Mersey Basin Campaign needed to maintain a flexible approach to securing funding, scaling the operation and working with the community, while being consistent in terms of its objectives. For example, approaches are different if targeting national or international funding, operating at a regional or catchment level or working with the community.

### Realistic timescales

The Mersey River suffered over 200 years of abuse and neglect. Whilst emergency responses have been implemented, the task of cleaning up the river basin will take at least 25 years. 'We are beginning to plan for activities beyond the original Mersey Basin Campaign end point of 2010.'

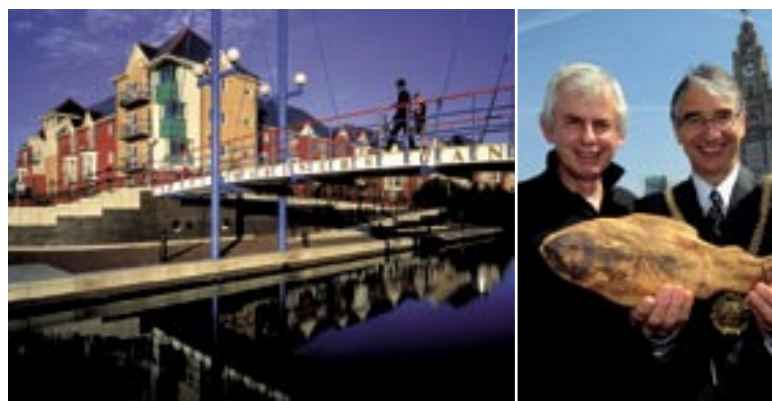
### Delivery at all levels

The experience of the Mersey Basin Campaign has shown that organisations and individuals need to be involved at all levels and for the long-term. Small-scale community projects are equally valid in terms of reaching the objectives as large-scale capital investment programs.

### Leadership

The Chairman of the Mersey Basin Campaign is appointed by the Secretary of State. This high level appointment enables the Campaign to engage and motivate partners from all sectors and achieve more immediate and far reaching actions.

River System	Mersey River, North-West England
Length	112 km
Area	4,680 km <sup>2</sup>
Origin, Tributaries etc	Mersey River and estuary flow west from Stockport, Greater Manchester, towards Liverpool Bay, Merseyside, and draining into the Irish Sea
Population	> 5 million
Role of River System	<ul style="list-style-type: none"><li>• Manufacturing industries (textile, paper, chemical, glass)</li><li>• Domestic wastewater treatment and disposal</li><li>• Habitat for fish, porpoise, grey seal and octopus populations</li></ul>
Riverprize	1999 International Thies Riverprize Winner



## The Future

The Mersey Basin Campaign team was the first winner of the International Thies Riverprize in 1999 for its work restoring the Mersey Basin. Winning the Thies Riverprize significantly raised the international profile of the campaign and enabled team members to share their lessons with other countries, and host foreign experts on-site for knowledge exchanges. An international advisory group was formed to foster such knowledge exchanges.

The Mersey Basin Campaign continues to improve water quality, encourage sustainable waterside regeneration and engage public and voluntary sector involvement. However, challenges still exist. Mark Turner explained that despite the return of an active fish population to the basin, several specific rivers, canals and 'heavily modified watercourses' central to the industrial era are yet to reach 'good ecological status' already achieved by the majority of rivers in the basin, 'and will require increased levels of activity' to be restored.

Waterside regeneration has been facilitated through the investment of 'significant sums of public and private money around the waterfronts of the Mersey Basin'. Derelict land alongside rivers and canals 'remains a challenge' for the campaign. Further, Mark Turner explains that litter and debris 'makes our rivers and canals appear more polluted than they actually are', and contribute to public perceptions that the Mersey Basin is still heavily polluted.



Planting sedges at Marshall's wetland, Torbay Catchment

## Torbay Catchment, Western Australia

The most significant environmental problems in the Torbay Catchment are closely linked to the condition of the waterways and wetlands. Large alterations to the natural drainage system keep the wetlands at artificially low levels to prevent flooding and an additional network of agricultural drains has created a highly modified environment. Combined with poor land management practices in the catchment, the result is eutrophic and degraded waterways and a decline in the quality and quantity of native vegetation. An increasing incidence of toxic blue-green algal blooms has negative impacts on the conservation and recreational values of the wetlands, and diminishes lifestyle quality for local residents.

The Torbay Catchment Group was initiated in 1999 in response to community concerns, and quickly received the support of key partner, The Department of Environment and Heritage (now the Department of Environment and Water Resources). In 2001, with the support of the Department and funding from Land and Water Australia, Torbay became a whole-of-catchment demonstration site and the 'Watershed Torbay' project was born. Additional partnerships were formed with Water Corporation, City of Albany, Western Australia State Departments of Agriculture, Conservation and Land Management, universities and the local NGO, Green Skills. This wide mix of players logically led to development of a project that integrates scientific research, local knowledge and community values. The partnership is largely community driven. It uses open community forums and catchment wide postal surveys to identify community priorities that ultimately became key themes for the catchment restoration plan.

Representation of a broad cross-section of stakeholders on the Watershed Torbay committees also ensured that the project undertook careful and objective assessments of information provided by the community, committee representatives, technical advisory group and contracted researchers. Perhaps because this is a strong community-led partnership, the Torbay planning process successfully included several initiatives designed to promote change and develop capacity for change among key land users in the catchment.



The restoration plan for the Torbay Catchment is comprehensive. It prioritises action targets and details the required actions, the stakeholder group(s) responsible and how to monitor progress and results.

Although the scope of the Watershed Torbay project is long-term, it has successfully engaged stakeholders, facilitated collaboration between stakeholders, achieved some behaviour change of land managers and enhanced the capacity for change among stakeholder groups. The project stresses that it purposefully and clearly articulated and implemented a complete whole-of-catchment framework for landscape restoration, and this was how it successfully managed the community change process required to achieve the river restoration objectives.

## Lessons learnt

As a relatively progressive minded and forward looking group, the Torbay Catchment Group realised a number of ways to improve their community driven partnerships and collaborations:

### Philosophy of change

Have a philosophy of change and use a change framework working on all elements simultaneously – pressure, creating vision, capacity and first steps

### Build trust

Dedicate time from the start to build relationships and trust between all players

### Conflicts of interest

Anticipate and manage conflict between interests of different players

### Understand the community

Develop an understanding of the community, its Indigenous and European history, values, leaders, and the impact of history on a project. Don't expect too much from community volunteers.

### Clarify expectations

Be explicit about the agenda of different partners in the project, and what each can and cannot do. Ensure that community expectations from project targets are realistic. Be flexible: Flexibility in style and pace of work is important. Slow down, take time to listen and respond to concerns as they arise.

### Community involvement

Build skill sets which aid serious community involvement. Give community members time to consider and discuss research and planning. Attract new people to groups for continuity and make involvement fun! Establish one to one contact with landholders.

### Encourage knowledge exchange

Require researchers to collaborate, share equipment, data and results. Foster researcher and community exchange. Engage local researchers if possible as they are better connected and more available. Develop science programs using a civic science approach that values and integrates local values, technical knowledge and research knowledge. Edit technical/science reports in plain language using local examples.

### Reflection and monitoring

Build reflection into projects. Engage in adaptive management by taking feedback that comes from reflection and monitoring, responding with problem solving and reporting back on all action taken

River System	Torbay Catchment, Western Australia
Length	180 km (total length of waterways in the catchment)
Area	330 km <sup>2</sup>
Origin, Tributaries etc	Marbellup Brook, Unndiup Creek (Torbay Main Drain), Five Mile Creek and Seven Mile Creek are tributaries that contribute to wetlands and an inlet at the bottom of the catchment
Population	3,000
Role of River System	<ul style="list-style-type: none"><li>• Tourism and recreation</li><li>• Wastewater disposal</li><li>• Major source of drinking water in the future</li><li>• Supports farming: beef grazing, horticulture, dairy cattle</li><li>• Irrigation for timber plantations</li><li>• High conservation value wetlands (Lakes Powell &amp; Manarup) are important habitat for migratory wading birds</li></ul>
Riverprize	2006 National Thiess Riverprize Winner

## The Future

The Torbay Catchment Group is presently in its third year of implementing the restoration plan, and is on track with short-term targets. The group has set 25 to 30-year targets to achieve water quality improvement. Andrew Marshall, former Chairman of the Torbay Catchment Group, noted that 'improved water quality is still a way off into the future. It takes time to do these sorts of things'.

Land use within the Torbay Catchment is changing, as new agricultural and horticultural industries, including timber plantations, reduce the dominance of the traditional beef grazing farms. Population is increasing in the catchment as larger landholdings become subdivided into smaller lifestyle blocks, creating additional pressures on the natural environment.

Chairman Phil Mellon acknowledged that the group needs to do things differently to stay ahead of the changes, and Catchment Coordinator, Karen McKeough, added that an increasing population on smaller farms and landholdings 'translates into more people the Torbay Catchment Group must work with to ensure the catchment continues to be restored and managed to best practice standards'.





Deadwood Creek, Siuslaw Watershed

## Siuslaw Watershed, USA

The Siuslaw Watershed was heavily impacted by a great deal of physical change after the arrival of European settlers in the late 1800s. Large-scale land clearing, draining of wetlands and channelising of streams has taken place since that time in an attempt to create pasture for cattle and cleared land for hay production and orchards. Coho Salmon inhabiting the rivers within the watershed were subject to forest over-harvesting, loss of habitat and were exposed to high levels of predation, almost to extinction. Streams were cleaned out and straightened and lost the structural complexity necessary to support aquatic life. Clear-cutting of forests and road construction led to increased landslides and debris torrents, while stream-bank erosion contributed unnatural inputs of sediment.

**Siuslaw Watershed: 60% of mature forest cleared in the 50 years from 1940 to 1990, Oregon Coastal Coho salmon listed as threatened in 1996**

The Siuslaw River Basin Restoration Project was initiated through a partnership that today includes the Siuslaw Institute, Siuslaw Watershed Council, Siuslaw National Forest, Siuslaw Soil and Water Conservation District, Oregon Watershed Enhancement Board, Ecotrust and the U.S. Fish and Wildlife Service. Reaching more widely, the Partnership also includes The Campbell Group and other private industrial landowners, the Bureau of Land Management, Oregon Salmon Plan participants, Cascade Pacific Resource Conservation and Development Area Inc., local schools, private landowners, local volunteers and more.

In the early 1990s, research on the natural processes affecting Knowles Creek within the watershed – including landslides, log jams and channel morphology characteristics – contributed

to a restoration program designed to remove or reconstruct roads, return wood structures to stream channels and re-plant riparian forests.

The Knowles Creek rehabilitation project succeeded because it ‘involved all aspects of participation’, especially through new partnerships between public and private sector organisations according to Peter Brunner, *Thiess Riverprize* Evaluator 2004. The project ‘opened the door to increased involvement of the local community in planning, implementing and monitoring future projects across the whole basin’.

Combined efforts between government agencies, scientific panels, landholders and community members restored the hydrology of local creeks and improved water quality, facilitating the repopulation of fish species in the basin, including the once near-extinct Coho Salmon. ‘It is helping to improve what was historically one of the world’s most productive aquatic and terrestrial ecosystems’, said Professor Paul Greenfield, Chair of the International Thiess Riverprize Judging Panel.

In Karnowsky and Deadwood Creek watersheds, high flood events now connect floodplains, and new structures provide rearing habitats and allow storage and recruitment of spawning gravels. Newly planted and enhanced riparian cover is contributing to increased fish habitat. Kevin Martin from Siuslaw National Forest noted that ‘the local community and economy benefits as well’. In 2003 and 2004 restoration projects generated between US \$2.5 and US \$3.7 million each year for the local economy through jobs and related expenditures. The Siuslaw River Basin Restoration Project also includes cooperation and guidance from the Confederated Tribes of the Coos, Lower Umpqua and Siuslaw ‘First Nations’, who once again stage an annual Salmon Festival.



'The Siuslaw Restoration strategy is innovative because, as partners, we jointly identify high priority restoration areas and together restore them in coordinated whole watershed efforts', said Kevin Martin.

'When I think about Siuslaw Basin Partnership, I think the long-term objective is the whole slate, not just watershed restoration and resource recovery, but also economic revitalisation, perhaps bringing some new economy to the basin, helping strengthen communities, education for the local schools, kind of getting the whole idea of healthy watersheds in our schools.'

**Johan Hogervorst**

SIUSLAW NATIONAL FOREST

Partners note that one of the major challenges has been the time and energy it takes to attract more partners and build trust and maintain relationships. 'Even at times when you're not working together, you better stay in contact or else something will come up and put a wrench in the whole thing', said Johnny Sundstrom of the Siuslaw Institute.

River System	Siuslaw River, Oregon, USA
Length	177 km
Area	2,040 km <sup>2</sup>
Origin, Tributaries etc	Drains from the Central Oregon Coast Range directly to the Pacific Ocean at Florence, Oregon
Population	19,500
Role of River System	<ul style="list-style-type: none"> <li>• Freshwater habitat for salmon and a myriad of other aquatic species</li> <li>• Recreation</li> <li>• Outflow of the region's 100+ inches of annual rainfall</li> </ul>
Riverprize	2004 International Thies Riverprize Winner

## Lessons learnt

The partnership has learnt some good lessons about diverse groups working together:

**Prioritising actions**

Prioritise (expensive restorative) actions to areas of highest need and greatest benefit as a joint exercise. It is a bonding experience.

**Admit mistakes**

Learn from mistakes together, and share the adaptive management approach (monitor, assess, review and learn).

**Deal with politics and media as a group**

Politics which impact the partnerships at government and community levels should be dealt with in a unified way, and common talking points and spokespersons should be determined in advance of requests from the media.

**Adaptation**

Partners need to be ready to change the specifics of the restoration program to attract funding from differing sources.

**Involve the community**

Involving schools and communities is important because it builds values (e.g. sustainability) that last over time. Allow people to understand how various issues (i.e. employment, climate change, habitat, wildlife) are related. Teaching people how to think rather than what to think is very important so that they can go on to address issues and make appropriate decisions themselves.

**Raise awareness**

Keep all stakeholders (public and private) and sponsors aware of restoration efforts and successes. Make the most of funds distributed by any kind of partner or potential partner, rather than complain about what funds they do not provide.

**Do not hide from controversy**

Community awareness and attention is heightened when issues are controversial. Encouraging informed debate, forums, and providing accurate information (on all sides) is a way of increasing community awareness and developing participation.





Siuslaw Valley

## The Future

As a result of winning the 2004 International Thies Riverprize the partners were able to leverage additional funds from funding agencies, as well as secure greater local recognition and support for restoration activities. The Thies Riverprize also provided international opportunities (twinning) to share relevant knowledge and techniques from the restoration works in Siuslaw with a watershed on Sakhalin Island, on the Pacific side of Russia. This work is ongoing and includes workshops for river managers, technology transfers, bi-national school interactions, and on-the-ground assessment and design.

According to Johnny Sundstrom, 'the degradation of our Siuslaw watershed has been somewhat arrested over the last 10 to 20 years. Over-harvesting of timber and fish has been stopped, and emergency measures put in place to protect remaining natural resources. This needs to continue until conditions return that allow species to thrive once again'. True restoration will take up to a century, said Charlie Dewberry, a private environmental consultant. 'It took us 100 years to get into this mess. If we think we're going get out of it in less than 100 years, we're only fooling ourselves', he said. 'It's going to take generations. Fortunately, there's a core group of people in this basin that have committed to this.'

Restoration and management of the watershed are still somewhat experimental in nature, which means a great deal of learning accompanies on-the-ground projects. Sustainability management of the Siuslaw watershed requires ongoing funding, adherence to consistent policy and maintaining momentum, all of which have been a challenge as a result of frequent changes in government policies and personalities. However, the strong commitment to partnership has helped the Siuslaw Basin Partnership succeed amid these difficulties. Johnny Sundstrom also explains that a challenge for the watershed partners is to foster the understanding that apparent 'crises' regarding climate change, habitat, wildlife and employment are quite interrelated, particularly for a society that still tends to manage such issues separately.

The future of the Siuslaw, like that of many rivers throughout the world is a future that is as much dependent on politics and social values as on the biological potential for recovery. The work of landscape restoration must also be focused on a cultural transformation where exploitation is replaced by sustainable management practices and the acknowledgment of nature's own budget.



[www.siuslawinstitute.org](http://www.siuslawinstitute.org)

