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Report from the seminar Networking with wetland managers in Nordic-Baltic countries

Kempele, Finland, 23-25 September 2008

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Introduction

The Nordic-Baltic Wetlands Initiative (NorBalWet) has been established in 2006 to promote the Ramsar convention; the conservation and wise use of wetlands. NorBalWet includes following countries: Denmark/Greenland, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Russia's Baltic region and Sweden.

Finland hosted the coordination group meeting and seminar in Kempele. There were 34 participants from 8 countries and we made field excursions to the two Finnish Ramsar sites: Liminganlahti Bay and Martimoaapa-Lumiaapa-Penikat mires. The NorBalWet coordination group discussed the mandate, terms of reference, operational guidance, CEPA activities and work plan for the next years. The seminar was funded by the Ministry of Environment of Finland and Metsähallitus.

Aim of the seminar 2008 was to continue valuable exchange of information between Nordic Baltic countries upon priority areas of wetland cooperation, also to form active networks on different levels of wetland actors. Main theme of the seminar was wetland management planning. Also Ramsar Convention, wetland policies, and lessons learnt from latest wetland projects were discussed.

This seminar report includes the abstracts of the seminar presentations. I hope that the reader will find these contributions interesting starting point for further engagement in issues related to wetland management.

Tiina Niikkonen
Metsähallitus

Threatened wetland types in Finland – results from the first national assessment of threatened habitat types

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Habitat destruction is one of the most important causes of biodiversity decline worldwide. Wetland habitats are not an exception and globally wetlands are considered to be one of the most threatened habitat types.

Red Lists for the species have been made in Finland since the 1980s, but none for the habitats, so far. The first national assessment of threatened habitat types in Finland was carried out during 2005-2007 by more than 80 habitat experts. The assessment was based on two criteria: change in quantity and change in quality. The starting point for the assessment was the development in the quantity and/or quality during the last 50 years (since the 1950s). These base values were then adjusted with predicted development in the near future and with early (before 1950s) decline or deterioration. The result of this assessment could then be tightened in case of rare habitat types or loosened in case of still common habitat types. As an outcome of this assessment process we got the Red List Category for each habitat type: **RE** regionally extinct, **CR** critically endangered, **EN** endangered, **VU** vulnerable, **NT** near threatened, **LC** least concern, **DD** data deficient.

Wetland habitat types did not form their own habitat group in the assessment, but were included mainly in four habitat type groups: Baltic Sea and its coast, Inland waters and shores, Mires and Traditional rural biotopes. In addition one wetland type was included in Forest group (inland flooded forests). About 150 wetland habitat types or habitat complex types were assessed.

Approximately half of the number of the assessed wetland habitat types or habitat complex types were classified as threatened (VU, EN, CR) in following habitat type groups: underwater habitats of the Baltic Sea, coastal wetlands, rivers and streams, mires. The most alarming situation is in the traditional rural biotopes (wet meadows) where over 80 % of the assessed types are threatened and in the freshwater spring complexes with both assessed types threatened. Freshwater lakes and ponds seem to have survived best, so far, with little over 20 % of the types being threatened. Only 31 wetland habitat types or habitat complex types were classified as least concern (LC). Most of them represent poorest and/or wettest peatland types that are still common, or habitats restricted to northern Finland.

In the list of the Finnish habitat types of international responsibility, wetland types are well represented. Approximately 70 % of the listed international responsibility habitat types are wetland habitats, mainly underwater and coastal habitats of the Baltic Sea, mire habitats and habitats related to the land uplift coast. The Finnish mire habitat types of international responsibility relate to cool and humid climate and relatively flat topography, both factors favouring the

development of large, wet mire habitat and habitat complex types. The habitats of the Baltic Sea are characterized by globally exceptional combination of features: low salinity, abundance of hard rock bottoms, lack of tidal influence and very fast post-glacial land uplift on the coast.

References

Raunio, A., Schulman, A. & Kontula, T. (eds.) 2008. Suomen luontotyyppien uhanalaisuus. (Assessment of threatened habitat types in Finland). Suomen ympäristökeskus, Helsinki. Suomen ympäristö 8/2008. 264s. Summary in English.
Home page: www.environment.fi > Nature conservation > Protecting and monitoring natural habitats > Assessment of threatened habitat types in Finland

Implementing the Ramsar Convention in Nordic-Baltic countries

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To answer to the question are we doing well in the Nordic-Baltic countries Tobias Salathé referred to the conclusion of 6th European Ramsar Meeting held in Stockholm 3rd-7th of May, 2008 and to the report of Regional overview of the implementation of the Convention and its Strategic Plan 2003-2008 in Europe.

Conclusions from Stockholm meeting were that Governments and decision-makers do not realize, nor take fully into account, the manifold wetland **ecosystem services**, their costs and their benefits for human well-being. Salathé emphasized to make sure that there is inclusive understanding of the comprehensive and wide-ranging **scope of wetland ecosystems** and their importance for sustainable development. Further more we need to step up our implementation capacities, while struggling to keep up with the increasing pace of **pressures** facing wetland ecosystems, exposed to climate change, reduction of fossil resources, human population growth and raising prices for land, food and other renewable resources.

Salathé rose the question is the Nordic-Baltic region one large wetland system and where are the borders of wetlands, while there are **216 Ramsar sites** at the region. Despite of the number of sites, there are still some gaps and need for new destinations. According to the national reports and overview we need to enhance exchange of know-how of management, link site management better with catchment planning, be more aware of hydrological functions of wetland ecosystems and strengthen the role of CEPA (Communication, Education, Participation, Awareness) activities as wetland visitor centres and World Wetland Day. We should realize how wetland ecosystems and water management are linked to each other and take into account different costs and payments of different services. Salathé reminded that Ramsar´s scope includes the Aquatic, Subterranean and Coastal marine wetland ecosystems.

There are concrete steps that should be taken to reach Ramsar´s strategic goal of wise use: national wetland inventories and assessments should be made, national wetland policies articulated, assessments implemented of wetland ecosystem services, utilize of Ramsar´s water-related guidance and restoration and rehabilitation of wetlands. Strategic goal of international cooperation we should work together for shared sites and catchments, joint activities and programmes, for shared (migratory) species, to exchange of know-how, to focus on common goals and to produce better results while reducing efforts thorough synenergies.

The most crucial part of strategic goal is capacity and effectiveness. The problems are limited capacities and funds, sectoral organization between and inside ministries, separation of executive power between central and local authorities and narrow focus of our minds. Proposed solutions are to activate National Ramsar Committees, work with national and regional offices of the

IOPs (like IUCN, WWF, Wetlands International, BirdLife, International Water Management Institute), designate and activate national focal points for Ramsar, for Scientific and Technical Review Panel and CEPA, organize joint meetings and work of national focal points of different multilateral environmental agreements and use the Ramsar strategic plan and national report format as planning and monitoring tools.

Salathé brought our mind how to deliver the Convention in our countries, designate:

- **Admistrative Authority** to have the main governmental agency responsible for the application of the treaty,
- **STRP focal point** a committed scientist with many contacts,
- **CEPA focal points** to provide leadership to spread the Convention's approaches to wetland and water management,
- **International Organisation Partners** official NGO partners of the Convention who contribute to its implementation, together with local stakeholders and
- **National Ramsar Committee** to spread the Convention's tools beyond individuals and to develop national policies

Salathé concluded by noting that wetlands are essential ecosystems for our water supply, flood management, resource production and thus for our sustainable economic development and need to be mainstreamed and become part of our governments' priority policies. Regional cooperation should build up a strong lobby to this end!

A Regional wetland strategy for the county of Västerbotten, Sweden

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The Swedish parliament has decided on environmental objectives for protection, restoration and wise use of wetlands in Sweden. A national wetland strategy was brought forward in 2005. The aim was to show how the national wetland objectives could be achieved.

Regional environmental objectives for wetlands, corresponding to the national objectives, have been decided at the county level by the County Governors.

A regional wetland strategy
The county of Västerbotten comprises about 50 000 km^2 land area, of which 9 600 km^2 consists of wetlands (20 %), mostly Aapamires.

A regional strategy has been worked out by the County administration. Several organizations participated in the work, such as the Municipalities in the region, the Forestry administration, land owner organizations and NGO:s. A careful analysis was made of the distribution and protection status of different kinds of wetlands in the county. The strategy comprises of four main parts:

(1) A model (prioritizing tool) helping to choose which areas to protect and/or restore. The model is based on nature conservational and cultural/historical values and/or criteria.

(2) Guidelines for protection. In the strategy it is stated that the wetlands in the *National Mire Protection Plan* ought to be protected as Nature reserves.

(3) Guidelines for restoration. The strategy emphasizes the need for restoring wetlands in agricultural landscapes. It also states the need for appropriate and long term management of restored wetlands.

(4) The need for collaboration between local and regional authorities, land owners, NGO:s etc to achieve the environmental objectives.

Download wetland strategy at: http://www.ac.lst.se/files/88pTbkXR.pdf

Remarks on tools of conservation related to Ramsar sites in the county
The most important protection tools in Sweden are *Nature reserves* and *National Parks*. The European *Natura 2000 network* is also an important conservation tool.

The Ramsar sites in the county of Västerbotten are protected as nature reserves and/or Natura 2000 areas. Thus, the Ramsar sites in the region are regarded to have a rather good protection status.

Towards ecologically coherent networks of protected areas

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A coherent network of marine and coastal protected areas (MCPA) is essential for protecting valuable habitats and for supporting species that use these habitats as feeding or breeding grounds, and to make the ecosystem more resilient to external threats like eutrophication, invasive species and climate change.
What is meant by an ecologically coherent network? The term ecological coherence has not been formally defined although it is a concept frequently referred to e.g. in the EC Habitats Directive and in OSPAR[1] and HELCOM[2] declarations. The HELCOM definition for ecological coherence, which has been modified from works by IUCN and OSPAR, includes four criteria: adequacy, representativeness, replication, and connectivity. In practice, these criteria take into account MCPA size and shape, coverage of species, habitats and landscapes, location of the MCPAs across bio geographic scales, and between-site connections at different scales.
Baltic Sea Protected Areas (BSPA) are a regional initiative by HELCOM Contracting Parties to protect the Baltic Sea marine environment. The network was founded in 1994 and was at that time the only international network of marine protected areas (MPA) in the Baltic Sea. Since the purpose of the BSPA network is primarily to protect marine biodiversity, the main emphasis is given to marine areas, while the network also covers coastal areas that are an inseparable part of the marine ecosystem. The BSPA network includes the majority of the marine and coastal Ramsar Wetlands in the region and, according to Baltic Sea Action Plan, all the Natura 2000 sites in the Baltic Sea should be nominated also as BSPAs. At present, the network consists of 96 sites.
The Baltic Sea Action Plan and the Habitats Directive state the obligation to assess the ecological coherence of the protected areas in the Baltic Sea until 2010. HELCOM has made a preliminary assessment of the ecological coherence of the BSPA network, which showed that the network is not yet ecologically coherent. Although the sizes of sites were adequate and many of the conservation features were sufficiently replicated or even interconnected, the representativeness of different habitats and landscapes was not satisfactory. Particularly, the protection of offshore areas was poor. In order to truly measure ecological functioning of the network, the assessment should include biological data from the Baltic Sea and the protected areas in particular. HELCOM is currently compiling biological data to the HELCOM BSPA database (http://bspa.helcom.fi), which contains also information on the management and

[1] The Convention for the Protection of the Marine Environment of the North-East Atlantic (1992)
[2] The Convention for the Protection of the Baltic Sea Environment (1974, 1992)

protection status of the sites. In this work, increasing attention will also be given to species and habitats linking marine and terrestrial ecosystems.

Ramsar tools for management planning

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The Ramsar toolkit on www.ramsar.org -pages includes 17 handbooks on different themes such as wetland management. There are some essential concepts to begin with: catchment basin approach, sequencing the "critical path" and the precautionary approach to planning.

In the nutshell **the catchment basin approach** is that *freshwater comes packaged in the hydrological cycle*, the hydrological cycle works in water catchment units, wetlands fulfil important functions in the water cycle. The river basin approach – by water catchment unit - is also promoted by the EU Water Framework Directive. Catchments shared by different countries need transboundary approaches.

The "critical path" includes

- Monitor & report: Basin and Wetland level
- Review, reflect, revisit priorities & plans
- Policy, regulatory & institutional contexts
- Design & initiate stakeholder participation process
- Inventory of wetlands in the basin
- Assessment of current status & trends
- Water resource function of wetlands
- Set priorities and objectives for wetlands in basin
- Water & land use management plan for basin (includes water allocation plan)
- Implementation at basin level: Water resources, Operating rules, Water allocations
- Implementation at wetland level: Management plan, Wise use, Restoration

And star the cycle again by monitoring and reporting at basin and wetland level to have a continuos and long-term planning process.

The **precautionary approach to planning** means that best available evidence should indicate that any human use/activity should not threaten the ecological character of the site. To apply the precautionary approach (UNCED) „where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".

Management planning is required to identify factors that affect, or may affect the features, to resolve conflicts, to define monitoring requirements, to describe management required to achieve objectives to maintain continuity of effective management and to obtain resources (financial, others).

Planning is a continuos and long-term, adaptable and dynamic process. Additional information becomes available over time and the planning evolves and changes. Different stages *in the process are:*

- identification of ecological character
- risk assessment, EIA, SEA
- in situ management interventions
- monitoring
- evaluation, modification and
- review management.

Some clarification needs to make with inputs, outcomes and outputs. Inputs*:* the resources provided for site management. Outcomes: the purpose of management, favourable conditions for the ecological features, e.g. based on restoration, sustainable use, maintenance management. Outputs: consequential by-products of the planning process e.g. policies, plans, interpretation, and infrastructure. Outputs may be misleading when the ecological features to be protected are in fact not.

The ecological character of a wetland is the combination of ecosystem components, processes and services (at the time of Ramsar site designation). Accordingly, a management plan needs to be developed for the site. Regular monitoring as part of ongoing site management activities to provide feedback. Ongoing monitoring and impact assessments with regard to human-induced adverse alteration of any ecosystem component, process or service.

A practical participative approach is to identify and work with key stakeholders, agree on objectives and work programme, get feedback and review and approve the management plan.

Ramsar example of the management plan format:

- Preamble - a concise policy statement
- Description - a synthesis of existing data and information, -> need for regular updating
- Evaluation – confirmation of the important features according to criteria of size, biological diversity, rarity, naturalness, fragility, typicalness, potential for improvement/ restoration
- Objectives – management goals measurable, achievable, prescriptive
- Rationale – describes management interventions necessary to maintain the site features
- Action and work plan – management interventions

Management plan includes geographical analysis, management units, zonation and buffer zones.

To develop a management **planning process,** there is the integrated package of the Convention tools:

1. Description: Ramsar Information Sheet, maps, define ecological character and update the description
2. Development of management plan: See guidelines, maintenance of ecological character and consultation with stakeholders

3. Management actions: regular monitoring, design restoration, revise management plan and remember the Montreux record
4. Ongoing monitoring and impact assessments: monitoring regime, wetland risk assessment

Strategic value of management planning is based on foresight and a strategic vision, provides answers to concrete issues and problems, is able to rule conflicts and indicate solutions. In management planning there is a need of regular assessment, evaluation and readaptation.

Status of management planning in Nordic-Baltic countries

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There are total of 216 Ramsar sites in the Nordic-Baltic region. The questionnaire was made to enquire the status to management planning in the region. Answers to the questionnaire were received from Estonia, Finland, Greenland, Latvia, Norway and Sweden. Russia completed about the status of management at its presentation. No answers were received from Denmark and Lithuania.

At about 38 % of Ramsar sites there were a management plan, but about 30 % of them were older than 10 years. At about 42 % of Ramsar sites there were no management plans. No info was received from 20 % of Ramsar sites.

Estonia. There are 12 Ramsar sites in Estonia, out of which 2 management plan have been prepared. Eight management plans are in a planning process and three will be made within 5 years and two within 10 years. One of the ready management plans is the Master plan of North-Livonia Transboundary Ramsar site.

Finland. There are 49 Ramsar sites. Management plans cover 64 % of the sites, but with 14 % of sites the plan is older than 10 years. About 10 % of sites the management planning process has already started. About 10 % of sites, management plan will made within 5-10 years. With 14 % of sites there are no plans to prepare a management plan. In Finland there are three stakeholders who prepare management plans: regional environmental centres, which manage about the half of the Ramsar sites, Metsähallitus, which manages about the rest of the Ramsar sites and local municipalities, which manages some of the private owned nature protection areas. Later during the seminar, there were two presentations of Finnish management planning: one example from regional environmental centre and one from Metsähallitus.

Latvia. There are six Ramsar sites in Latvia. Five of them have management plans. One of them is older than 10 years and one is in planning process and one will be made within 5 years. One Ramsar site has two different areas and so two different management plans.

Norway. Out of 37 Ramsar sites in Norway, there are seven management plans ready. Four management plans are older than 10 years. There will major renewable project going on so that all management plans will be updated by 2018. Fifteen management plans are already on planning process. 17 management plans are planned to be prepared within 5 years and 20 within 10 years. Five new Ramsar sites will be designated in near future.

Russia. There are six Ramsar sites at the NorBalWet –region. Two Ramsar sites have partly management plans. Management plan of Pskov has been made by 2003 and is confirmed, but the problem is that it is not implemented. Svir Delta area strict reserve area has management plan, which covers about 60 % of the area. Rest of the site has no other status than Ramsar site and has nor financing or management plan. Management plans of Kurgalski Peninsula, Lebiazhye and Beryozovye Ramsar sites are now on process. Difficult situation is with Mshinkoje Wetland Ramsar site.

Sweden. There are 51 Ramsar sites and all of them are either completely or partly designated Natura 2000 sites, and most are also completely or partly protected as nature reserves. Management plans have been (or might still in some cases be in the process of being) established for all nature reserves and Natura 2000 sites. Each reserve designation decision also contains regulations for the area. Management plans are normally established along with the decision to form the nature reserve, thus the age of management plans within Ramsar sites vary widely. There is ongoing work to generally revise and update management plans when needed, but this applies to all of our approximately 3,100 nature reserves. As it is the County Administration Boards, our 21 regional government authorities, that are responsible for management of protected nature in Sweden, we do not have the national overview.

The situation in 2005 was that in 35 of the 51 Ramsar sites in Sweden, management plans existed and were being applied in nature reserves covering the larger part of the Ramsar site. In 8 sites, the management plans responded to nature reserves covering only part of the Ramsar site – though this could entail quite a substantial part of the site. Additionally, all of the 51 Ramsar sites are to varying extent designated as Natura 2000 sites, in which management plans have or are being developed, as mentioned above. This applies especially to the 8 sites that were lacking management plans in 2005. In addition, for the 8 Ramsar sites partially covered by nature reserve management plans, the management plans will be extended or supplemented as larger parts of these sites are also Natura 2000.

Monitoring the effects of restoration on Finnish protected peatlands

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Drainage for forestry has caused major changes in Finnish peatland ecosystems. Altogether 60 % of the original peatland area has been drained. Changes have been most severe in Southern Finland, where almost 80 % of all peatland area is nowadays drained. Drainage and other forms of land use have had harmful effects on mire species and habitats. For example in the recent Assessment of threatened habitat types in Finland (Raunio et al. 2008) only 26 % of mire habitat types were classified as Least concern (LC), with more than 50 % being classified either vulnerable (VU), endangered (EN) or critically endangered (CR).

Restoration of peatlands drained for forestry has been done in Finland since early 1990's. Restoration measures have mainly been done in state-owned conservation areas, where almost 15 000 ha of peatlands have been restored. Approximately same area is still in need for restoration. The aim for restoration is to restore a functional mire ecosystem that can maintain viable populations of its characteristic species. Main methods of restoration are cutting the trees grown during drainage and filling-in the ditches with peat.

Guidelines for monitoring the effects of restoration in Finnish conservation areas are published recently (Päivinen & Aapala 2007). Monitoring of restored peatlands is divided in three main categories: general monitoring, diversity monitoring and hydrological monitoring.
General monitoring is carried out on all restored peatlands. The objectives are to verify the technical success of restoration measures and to solve possibly appeared problems as early as possible. General monitoring is also needed to ensure the activation of desired succession after rewetting.

Diversity monitoring includes the monitoring of vegetation and day-active butterflies (Lepidoptera). The objective for diversity monitoring is to study the success of restoration on species and community level. For vegetation monitoring a network of monitoring sites is being set up throughout Finland. The network includes sites of different peatland habitat types with ten replicates in each class. Also pristine control sites are included. Monitoring is done on permanent sample plots. For butterfly monitoring permanent monitoring lines are established. On each site there are three separate treatments: a pristine mire, a drained peatland and a restored peatland.

Hydrological monitoring is divided in 1) hydrological observations on vegetation monitoring sites and 2) discharge monitoring. The objectives are to study the effects of restoration on peatland hydrology and downstream water courses. Hydrological observations are made on 39 vegetation monitoring sites. On each site water table level is monitored with continuous electronic data logging and water samples are collected four times per year. Discharge

monitoring is done by monitoring the amount and quality of run-off water from separate watershed areas. Pristine control sites are included in both types of hydrological monitoring.

First results of monitoring show mainly positive signals (e.g. rise of water table) about the effects of restoration. Results also highlight the importance of carefully planned long-term monitoring.

Case study: Management plan of Martimoaapa mires

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Basic information
Area is 134 sq.km. It is established in 1981. The area is managed by Metsähallitus.
The Martimoaapa - Lumiaapa - Penikat Mire Reserve is one of Northern Finland's most important places designated for the protection of mires. It is also significant in the protection of threatened birds. In addition to mires there are also prominent old-growth forests in the reserve.

Mires
There are a variety of mire types at Martimoaapa - Lumiaapa - Penikat Mire Reserve. They differ in vegetation type and what nutrients are present. There are barren mires that require few nutrients as well as fens, which need nutrient rich land to be able to thrive.

Hill landscape
The Kivalot is a 100 km long chain of high hills. The chain reaches as far north as Eastern Lapland. A part of this chain called the Penikat Hills is within the western portion of the mire reserve.

Lake Area
The absolute gem of the area is Lake Martimojärvi and its extension Lake Pikkujärvi which are located in the east part of the mire reserve. They are barren and have brown water. During late summer the northern shoreline is a good cloudberry picking site.
South of the lakes there is a flark which is difficult to get to. It is the overgrown pools of Lake Martimojärvi and is probably the most untamed area in the mire reserve.

Old and Young Forests
Some of the forests in the Martimoaapa - Lumiaapa - Penikat Mire Reserve are valuable old-growth forests. The main trees which grow in these old forests are spruce, pine, birch and grand-sized aspens. Forests which are very nearly in their natural state can be found on the slopes of the Kivalot Hills and in the south part of the reserve.

Activities in Martimoaapa
Marked trails: There is a 12,8-km-long marked easy to walk hiking trail across the mire reserve. There are four wilderness huts and five fire places with shelter for visitors. Bird watching: The mire reserve is a bird watchers' paradise. There are three bird watching towers. Nature trail: 3-km-long children's nature trail

with fairytale themes. Cross-country skiing and ski trekking maintained trail and off trails. Fishing, hunting, berry and mushroom picking. Reindeer herding-traditional activity on the area.

New land use and management plan preparation

A new land use and management plan was prepared in 2008. According to the plan, one new trail and one new nature tower will be built. The biggest part of the area is classified as remote area – i.e. no visitor activities are located there.

Case Study: Management plan of Liminganlahti

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The bay of Liminganlahti is one of the most important wetlands in Finland. The area was included in the national Waterfowl Habitats Conservation Programme in 1982. Later on the area was enclosed to the European Natura 2000 network. Liminganlahti was designated as SPA and SCI on the network. The size of the SPA area is 11,870 hectares. The designation of nature reserves have been already done in the area of 11,691 hectares. Main habitats based on the Habitats Directive of the European Union are estuaries (95 %), boreal Baltic coastal meadows (3 %), and natural forests of primary succession stages of land upheaval coasts (2 %), coastal lagoons, and boreal Baltic sand beaches with perennial vegetation and decalcified fixed dunes with *Empetrum nigrum*.

Preparation of management plan started in 1996 in a part of Liminganlahti LIFE Nature project supported by the European Union. Aim of the LIFE project was to protect the nature values of the bay of Liminganlahti by integrating biotope management, nature protection and other land use modes in way compatible with sustainable development. Cooperation with the local people, organizations, state and municipality authorities and other projects was the key method. After three years intensive work in five local working groups all aims set to the project were achieved. Private landowners, authorities, hunters, fishermen and nature conservationists NGO's were involved to the planning work. The planning process involved among others an extensive public hearing with several informative meetings, negotiations with landowners, and dozens of local working group meetings. As a result of the work the management plan was prepared and different requirements as nature conservation, habitat management, species protection, nature tourism and other land use modes were integrated and major threats prevented.

The implementation of management plan started already during the project time (1996-1998). The size of protected areas established by LIFE project was over 1,800 hectares. This includes nearly 800 hectares wide hunting restriction area in a very important staging site of ducks, swans, geese and waders. After ten years active work the establishment of nature protection areas is now near the completion. The extent of hunting restriction areas was expanded to 2,700 hectares. Biotope management work in the area of 500 hectares area was started during the LIFE project by removing of Reed, moving of coastal meadows, restoring of coastal lagoons and managing vulnerable plant and bird species. Habitat management work has been extended after the LIFE Nature project. The quantity of pastures is over 900 hectares and mowing areas over 150 hectares, nowadays.

The updating process of the management plan will be started in the near future, because land owning circumstances has been changed, nature reserves and especially the protection orders for the reserves were established, restoration plans for habitats and management plans for species were prepared and furthermore some new threats have been occurred since the end of 1990’s.

BIRD – Wetlands and valuable landscapes for rural development

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Background

Baltic Sea Region offers a broad spectrum of wetlands, nature reserves and cultural landscapes, very well suited for a growing ecotourism and a rural development.

Many attractive landscapes are situated in rural areas where the population is decreasing due to modern technologies in agriculture and forestry. An increasing ecotourism can become a base for increased employment and entrepreneurship in these rural regions. At the same time a professional and sustainable care of valuable landscapes is essential to events and to facilities for visitors.

The main objective of the project BIRD was to develop good links between high landscape values on one hand and rural development on the other hand.

Questions

A successful and sustainable development of ecotourism raises some fundamental questions:

- Which are the best ways of caring and managing sensitive rich landscapes?
- How do landowners, entrepreneurs, organizations, authorities and expertise cooperate in spatial planning to reach the best mutual result?
- How to increase the accessibility and how to market interesting places in order to achieve an increased focus on valuable rural areas?
- What education and information do different target groups need to turn the project recommendations and possibilities into reality?

Four separate Working Packages are carefully described in the project, each of them corresponding to the four crucial questions, mentioned above.

Management (WP 1). Strengthen experience among managers and experts about sustainable management and maintenance of wetlands and cultural landscapes.

Spatial planning in a cross-sectoral approach (WP 2). Promoting action oriented initiatives. Relevant vertical authorities involved in process.

Accessibility, information and marketing (WP 3). Involvement of existing tourism infrastructure. Spreading information and promoting ecotourism and cultural tourism. Special focus on disabled.

Education (WP 4). Focuses on landowners, local entrepreneurs and local population through a collaboration programme between stakeholders.

Results – a summary
In the following summary, we can only highlight some of the main results, the characteristic quality of which is their sustainability and applicability far outside the BIRD partnership:

WP1 – A description of implemented local demo sites showing different methods for the conservation of sensitive nature areas.

WP1 – A new methodology for purchasing nature services by involving local entrepreneurs, thus creating local employment and environmental commitment.

WP2 – A cross-sectoral and bottom-up methodology for broad local involvement in the management of sensitive nature and culture areas.

WP2 – A description of the potential use of EU RDP financial sources for the implementation of BIRD Project ideas.

WP3 – A number of field installations for increased accessibility and information, also adopted for the disabled.

WP3 – A pre-study on the installation of an international Wetland Information Centre at Lake Hornborga, Sweden.

WP3 – A guideline for “Best Practice” in local field installations for accessibility and information to the public.

WP4 – A common package of education and training material has been developed and published, regarding outdoor teaching, nature conservation and sustainable tourism.

WP4 – Education and training activities has been implemented, touching hundreds of participants on many levels from school children to university students.

Partnership: national, regional and local public authorities, associations and universities from Estonia, Finland, Germany, Latvia, Lithuania and Sweden.
Approximate total project budget: 3,99, million €
ERDF: 2,46 million €
Duration: 2004 – 2007
Lead Partner: County Administration Board of Västra Götaland, Sweden
Contact person: Johan Jannert
www-pages: www.eurowetlands.org

Mire studies, management and monitoring in Latvia

Mara Pakalne
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Raised bog habitat and hydrological studies are carried out in the four LIFE project “Implementation of Mire Habitat Management Plan in Latvia“ sites that include Cena Mire, Stikli Mires, Klani Mires and Veseta Floodplain Mire with the total area of 10808 ha. The sites are nationally and internationally important as include diverse habitat types and protected plant and animal species. In total 14 habitats of EU importance and 14 species of EC Habitats Directive Annex I and II are known in the project sites, from which 4 are priority habitats (7110*, 9080*, 91D0*, 9010*).

Mire vegetation in the intact parts of the raised bogs has a typical hummock - hollow complex and includes labyrinths of bog pools and ridges. At the same time the sites are threatened by drainage, peat extraction and fire.

To stop the desiccation of the valuable raised bog habitats management plans are elaborated that are the basis for all the management actions. The management plans include such actions, like rising of the water level and management of fen habitats. Prior to the start of raised bog management, monitoring of the habitat and site hydrology is carried out.

Habitat monitoring is carried out in all the 4 project sites where building of dams and habitat management is planned. In 2005 in total 130 permanent plots were established next to hydrological monitoring plots, in places where vegetation changes are most likely to occur.

Hydrological and habitat monitoring is integrated. In the plots for habitat monitoring, water level measurement is carried out.

To characterize the mire vegetation of Cena Mire 114 relevès were made from which 19 were compared with water sample chemical analysis. In Cena Mire vegetation studies were combined with the evaluation of correlation with environmental factors. Pollen and macrofossil analysis testify that Cena Mire has originated at the end of the Atlantic Time due to the ground water level rise in a wet depression.

Experiences from management of a coastal Ramsar Site - Jæren Wetlands

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The Jæren Wetland system is approximately 30 km^2, located on the south-west coast of Norway. Jæren is a flat coastal area with intensive agricultural activity. The wetland system consists of shallow seashore, fen, moors and wetland. Jæren is the most important bird area in Norway for migration and over wintering, and the flora has several national rare species. Several of the original freshwater sites have been drained the last 100 years. The first areas were protected in 1985, and in 2002 this was extended to 22 protected areas in total. In 1985 the same area got RAMSAR status.

Here, the area recourses for nature management are small. Along the narrow seashore are shallow water with agricultural run-off, dumping on the shore and a lot of building activities in close proximity to this sensitive area.

Among several protected wetlands, the largest protected area is lake Orrevatn. The lake has large numbers of migrating and over wintering water birds. However, there is only a marginal buffer zone between lake and cultivated agricultural land. High agricultural run-off leads to an overgrown shoreline. The management of this area has great challenges, both in maintaining the rules of protection and in attempting to improve the biotope.

The protected wetlands system has only few regulations for tourists and is part of a recreational area to a population of about 250.000. It is an area for walking, water sport, camping, sunbathing, cultural excursions and commercial tourism. Still there are remaining small fragments of rare natural area, but these fragments are threatened by cultivation and fertilizing.

The borders between the small fragments of natural and cultivated land are decreasing, and there are few regulations to secure unprotected areas against devastation. To solve these problems it’s necessary to carry out frequent inspections and immediate reactions to violations.
Further, information efforts are carried out to increasing the knowledge about the sensitive nature among farmers and tourists, hoping to increase the knowledge about this vulnerable area. By dividing protected areas into different zones of management, efforts are done to canalize the tourists.

Aiming at optimal network of reed beds and coastal meadows

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The Interreg IIIA "Reed Strategy in Southern Finland and Estonia" project (www.ruoko.fi) was headed by the Southwest Finland Regional Environmental Centre and sought to establish a balance between the utilisation and preservation of reed beds and the restoration of coastal meadows. The pilot areas were the city of Turku, the bay of Halikonlahti (in the municipalities of Salo and Halikko) and the Estonian Väinameri coastal areas. The budget was 992 000 euros and duration 2005-2008.
The reed beds in Finnish coastal areas have expanded aggressively over the past few decades. The amount of managed coastal meadows in Finland has declined from 57 000 hectares (1950s) to ca. 4000 hectares. That is mainly because cessation of grazing and followed overgrowth by reed. In current situation there are not enough meadows to keep up favourable conservation status of coastal meadow species.
Project estimated that it may be possible to utilise an estimated 12 500 hectares out of the total of 30 000 hectares of reed beds in South Finland's coastal areas (not including those in inland waters) for bioenergy and construction materials. 7 500 hectares of reed beds should be restored and turned into coastal meadows by grazing supports.
Reed beds are in Finland viewed as a threat to leisure use, water quality and the life forms of coastal meadows. On the other hand, reed beds can bind solid matter of catchment water, offer shelter for summer residences, shelter for wave erosion and habitats for various animal species.
If planned well, the utilisation of reed beds will enhance biodiversity, help to protect the waterways and the air, and encourage the use of the coastal areas for leisure purposes. Achieving this win-win situation is a central goal of the strategy. The overview planning used in the pilot areas should be implemented more extensively in other Baltic coastal areas, together with establishing harvest chains.
Calculations of values and benefits of ecosystem services of optimally managed coastal reed bed- meadow network should be made to give food for decision makers. We could harvest winter or summer reed at sustainable places and in a sustainable way to increase nutrients and carbon uptake from the Baltic Sea and improve water quality (less decaying material). By cutting summer reed once a year average uptake of phosphorus is 4,5 kg per hectare and nitrogen 50 kg per hectare. The winter cut material with small ecological footprint could be used for bioenergy or thatching (roofing of houses). Reed beds could furthermore be cultivated in the catchment area flooded fields and artificial wetlands.

The deterioration of water retention ecosystem service of big river catchment areas by ditching of forests/bogs and straightening waterways, together with intensified agriculture, are reasons for increased solid material and eutrophication of the Baltic Sea. This deterioration of catchment area ecosystem services and habitats has for its part led to the deterioration of the Archipelago

Sea ecosystem services. The importance of the restoration of these services should be recognized and actions should take place same time in the catchment areas and in the Baltic Sea.

Project outcome generated a Parliament question of some MPs. Our Minister of Environment was interested in this important issue and subsequently Finnish Ministry of Environment requested Southwest Finland Regional Environment Centre to prepare suggestion for (summer and winter) reed harvesting support in spring 2008. The support could be included in the Finnish Agri-Environment programme. Centre prepared suggestion including idea of proper overview planning of our whole coastline. During 2008 discussions take place in the working group responsible for changes in the A-E programme. Enthusiastic entrepreneurs are waiting for new national funding to establish harvesting chains and develop machinery.

The planned support together with established Programme of Measures of Reed Strategy would have a significant impact on Finnish coastal areas and marine gulfs. Establishing international Euroreed –network by 2010 is included in the Finnish Programme of Measures. This network could aim at exchange of knowledge between European coastal areas, especially Natura-sites, and managers around coastal areas of Europe. The idea of “ecologonomy” and creation of win-win situations is essential. The concept of Adaptive Management and Miradi -software could optimally be applied for monitoring purposes in the coastal Natura –areas in the frame of Euroreed network.

More information:

1) Eurosite AGC in Turku; presentations concerning Ecosystem services
http://www.eurosite.org/article.php3?id_article=559

2) Read up on Reed
http://www.ymparisto.fi/default.asp?contentid=247909&lan=fi&clan=fi
Reed Finnish publications
http://www.ruoko.fi/index.php?page=julkaisut

Sites in the Russian part of the Baltic Sea catchment basin – current state, problems and prospects

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There are six Ramsar Sites with total square of 238 000 ha (*Beryozovye Islands, Kurgalski Peninsula, Lebiazhye, Svir Delta, Mshinskoye wetland system and Pskov-Chudskoye Lake Depression)* within the Russian part of the Baltic Sea catchment basin. All of them include such natural values as representative, rare or unique wetland types, important breeding, moulting and staging areas of water birds and biologically valuable forests.

The forms of protective and sustainable use management regimes have been defined in individual regulations prepared for each site. The regulations were developed in 1994 (when the sites in question were designated), approved by federal conservation authorities, and adopted by Administrations of Leningrad and Pskov administrative regions of the Russian Federation. General responsibility on the Ramsar Sites management is laid on the Ministry of Natural Recourses of the Russian Federation. In practical terms the management depends, first of all, on national protective status of each area:

Strict nature reserve (*zapovednik,* IUCN Category I) managed at federal level – *Svir Delta/Nizhne-Svirsky nature reserve (2/3 of the Ramsar Site square).* The Reserve has federal financing, professional staff (scientists, rangers), proper management and protection. Regular biodiversity monitoring is carrying out. For the rest 1/3 of the area there is no protection status, no staff and no funding.

Nature reserves/sanctuaries/wildlife refuges (*zakaznik,* IUCN Categories IV to VI) **managed at federal level** - *Mshinskoye wetland system/Mshinskoye Bog zakaznik; Pskov-Chudskoye Lake Depression/Remdovsky zakaznik.* They have no staff and no purposeful funding. Scientific researches and inventories are carried out by academic institutions and universities of St.Petersburg and Pskov. Management plan for Pskov-Chudskoye Lake Depression was designed and improved as a result of international projects (Danish-Russian project "Development and Implementation of a Management Plan for Lake Chudskoye-Pskov Ramsar Site" (2001-2003) and Estonian-Russian "Project on transboundary management of nature reserves at Lake Peipus area - Alam-Pedja, Emajõe-Suursoo and Remidov nature reserves" (2006-2007).

Reserves/sanctuaries/wildlife refuges (*zakaznik*) **managed at regional level** - *Beryozovye Islands, Lebiazhye and Kurgalski Peninsula.* They are funded through the Regional Target Program on support of Protected Areas of the Leningrad Region, although have a lack of staff. Traditionally the scientific

researches are carried out at these sites by academic institutions and university of St.Petersburg. Increasing anthropogenic pressure (construction of new harbours in the Gulf of Finland, recreation, forest cutting) is the main threat for the areas.

Management plans are developed for all three sites (partly within the framework of Finnish-Russian project “People, Nature and Harbours” implemented in cooperation of Metsähallitus, Baltic Fund for Nature and Administration of Protected Areas of the Leningrad Region in 2007-2008).

The necessary prerequisites for sustainable development of the Ramsar Sites:

- Co-operation of local stakeholders and communities (participatory approach),
- International co-operation,
- Using Ramsar Sites as the model monitoring areas (biodiversity monitoring, biomonitoring of climate changes etc.). Unification of monitoring methods
- Introducing international experiences in sustainable management of PAs
- Possible co-operation of Ramsar secretariat and HELCOM
- Increasing Russian federal and regional contribution in the Ramsar Sites management.

Cooperative management of the North Livonian Transboundary Ramsar Site

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Collaboration among the Baltic States in the field of nature conservation is guided by a number of trilateral or bilateral agreements. The first trilateral agreement on environmental cooperation was signed already in 1995. However, most transboundary cooperation for nature protection takes place in frame of individual projects or even private initiatives of scientists for joint research.

The area along the coast of the Bay of Riga and on the both side of the Latvian-Estonian border is called North Livonia. On the both side of the border there are several protected wetland areas and a Biosphere reserve on the Latvian side of the border. As result of active transboundary cooperation on the base of thee Ramsar areas (Nigula, Northern Bog, Sookuninga) the **North Livonian Transboundary Ramsar site** legally announced here in 2008.

Mutual understanding of co-operation between managers of joint transborder wetland system became accepted by both sides step by step and nowadays has resulted in joint projects. The co-operation between the border nature reserves North-Vidzeme Biosphere Reserve (established 1990) and Nigula Nature Reserve (established 1957) has lasted for some time and was strengthened by the agreement for joint nature conservation management (2000) between the governments of Estonia and Latvia. The project "*Protection of High Biodiversity through Latvian-Estonian Cross-border Protected Area*" was initiated by the Estonian and Latvian Funds for Nature and implemented on 1996-1998. The project was supported with grant of the Regional Environmental Centre for Central and Eastern Europe (REC). European Council had chosen the given area as one of the pilot areas for development of nature tourism (1998). Cooperation between two protected area administrations was a driving force raising local sustainable development activities in the whole transborder area.

As such one must mention Phare Credo project (1999-2000) with the aim for the development of the North Livonian Economic Area (North Livonia) implemented by local authorities. A pilot project was carried out to initiate the co-operation between tourism entrepreneurs. One of the more prominent transboundary projects in region has been the "*Integrated Wetland and Forest Management in the Transborder Area of North-Livonia (Estonia-Latvia)*" funded by The Netherlands Programme International Nature Management Central and Eastern Europe (PIN/Matra) is implemented to develop joint Transboundary Master Plan for future cooperation during 2003 - 2005 (http://www.north-livonia.org).

The project aims to improve the co-operation between Latvia and Estonia in the protection and management of transboundary wetlands, wet forests and semi natural grasslands. Activities include hydrology and wetland management,

wildlife, geographical information system, sustainable forestry, ecology and management planning, nature friendly farming (incl. promotion of the endangered Estonian Native Cattle breed), cultural heritage and nature tourism. Transboundary datasets has been established regarding hydrology, wildlife management, cross border ecological network as well pilot areas for wetland restoration. There were major problems with maps at the beginning of the project, which were solved by joint efforts of specialists, involving different state institutions on both sides of the border (including Ministries of Defense and Ministries of Interior). A good output of the project is the transboundary GIS database, which is important tool for future transboundary cooperation in North-Livonia. The aim of integrated nature conservation will be attained through a **Transboundary Master Plan** (English version of the document is available for download at: http://www.north-livonia.org/report/MP-North-Livonia.pdf) that gives the basic approaches for future management of the area.

The PIN/MATRA project has been followed by the INTERREG IIIA project WETLIVONIA "*Tuned management and monitoring of the transboundary protected areas in North-Livonia as a support for local development*" (2006-2007) with the following main objectives: Continuing co-operation between nature management institutions for management of valuable habitats in North-Livonia, planning local infrastructure in PA-s and for management PA-s, river habitat restoration and planning and setting up a cross-border monitoring system for the management of transboundary Ramsar areas including creating facilities for Transboundary Research and Monitoring Centre for future studies in North-Livonia. More information about this project is available at: http://wetlivonia.north-livonia.org.

Political, financial as well as methodological constraints significantly limit effective transboundary cooperation. However, the stakeholders admitted that regular meetings and information/experience exchange is very useful and needed to meet the common obligations set by the needs from protected area management. Transboundary cooperation is a good tool for changing traditional wetland management approach of protected areas from command & control management to **integrated community based adaptive ecosystem management**, which is more acceptable by local inhabitants.

Wetland Link International – a global network for wetland educators

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WLI – set up in 1992, in order to strengthen wetland education networks through wetland education centres, and has a Memorandum of Co-operation with Ramsar to deliver CEPA support internationally. The definition of a 'wetland education centre' is broad, encompassing large built centres with interactive exhibits and thousands of visitors, to small community-run projects with little infrastructure. The network now has 350 members across the globe, and a flourishing Asian network which delivers support to local partners across Asia.

Chris Rostron is the new manager dedicated to WLI, started at the beginning of August, based at the WWT London Wetland Centre, UK. Key tasks include refreshing membership and improving communication, developing new strategy and branding, working up key themes, assessing strengths of WLI and consulting with members on what they want. Chris is attending the Ramsar meeting in South Korea and will run a workshop with regional contacts to develop the forward strategy.

Key aims of WLI come under:
1. Communication
Developing regional leads and networks, updating and maintaining a database of members; e-mail groups and regular contact; twinning of members; website development.
2. Supporting existing centres
Sharing resources and best practice; regional networks; training and skills development.
3. Developing new centres
Identifying opportunities in areas with good wetlands but few centres; supporting developing projects where partners are already active.
4. Raising profile of wetland CEPA
Lobbying; developing resources

The activities and work areas will be focused on four main areas which are:
Wise use of wetlands
Ramsar definition; ecosystem services; tying in to World Wetlands Day.
Flyways
Building CEPA element; linking wetlands; complementing projects such as the African-Eurasian flyway project 'Wings Over Wetlands'.
Climate change
Mitigation role of wetlands in reducing flood impact and storing water; impact on wetlands of changes in climate change.
Endangered species
Internationally / locally rare species and how projects can support them.

WLI cannot work as alone co-ordinatory post, but will deliver outcomes through regional initiatives such as the WLI Asia network and NorBalWet. There is a lot of overlap and we need to work together to ensure that we are maximizing our use of resources, using WLI to push forward local projects and using the experience of NorBalWet to support other networks.

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Presentation of www.norbalwet.org

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The content of the NorBalWet pages is as follows:

- **Participating countries**
  The national nature management authorities – how they are run, authority etc.
  Contact person: Focal Points, STRP, and CEPA
  About the Ramsar sites, links and photos, information about visitor centres
  List of stakeholders of co-operation
- Background and aims
  About the formation of NorBalWet, mandate …
  Links to Ramsar
- Co-operation projects between member countries
  About the project – participants, aims, financing, reports …
  List of priority areas for co-operation.
- **Archive**
  Information and reports from earlier NorBalWet conferences, seminars and workshops.
  NorBalWet documents
  Publications
  Photos
- **Organising and secretariat**
  How NorBalWet is organised, who has the chair, contact person.
- **Question forum**
  Ideas? Need a contact or partner, data, reference …?
- **News and forthcoming events**
  Important events, next seminar etc
- **Restoration projects**
- **CEPA**
  World Wetlands Day
  Wise-use case studies
  Environmental education

Timetable for www.norbalwet.org:

- September - October 2008: Receive and amend website structure in accordance with suggestions from Kempele seminar.
- From September 2008: Material sent to Norway is published on the website
- Spring seminar 2009: Participants from the countries' focal points receive a short course in how they can update the website themselves.

The website is now functioning as Norway will continuously update the website as the information is received. The success of the website is dependent on active participation!

«Global warming may dominate headlines today, ecosystem degradation will do so tomorrow»

Tobias Salathé
Ramsar Convention Secretariat, Rue Mauverney 28, 1196 Gland, Switzerland

Salathé summarized key messages from two essential international reports: Ecosystems and human well-being: wetlands and water – a Report of Millennium Ecosystem Assessment[1], made 2005 and interim EU report of the economics of ecosystems & biodiversity (TEEB)[2], made 2008. Further more Salathé pointed out important draft resolutions which will be concerned during the Ramsar´s 10th Conference of Parties in South-Korea 27.10-4.11.2008.

Millennium Ecosystem Assessment provides an assessment of the current state of our ecosystems. The synthesis report about the findings of the assessment on and near-shore marine wetlands has been produced closely with Ramsar Convention. Ramsar´s Scientific and Technical Review Panel has formulated some key messages from the Millennium Ecosystem Assessment as following:

- Wetlands encompass at least 9% of the land surface (1’280’000’000 ha, nearly the size of the Russian Federation).
- Wetland degradation and loss is more rapid than that for other ecosystems.
- Wetland loss is driven by land conversion, infrastructure development, water abstraction, eutrophication, pollution and over-exploitation.
- Climate change is further exacerbating loss of wetland biodiversity.
- Continued wetland loss will reduce human well-being, especially for poorer people in less developed countries.
- The principal supply of renewable freshwater for humans comes from wetlands, including lakes, rivers, swamps and groundwater aquifers.
- A cross-sectoral focus is urgently needed.
- Integrated management to be addressed at catchment basin scale.
- Wetlands deliver a range of critical services vital for human well-being.
- Wetland services are arguably valued at 14’000’000’000’000 USD per year.
- Current freshwater and marine fisheries are in excess of sustainable levels in some regions.
- Progress towards achieving the Millennium Development Goals depends on maintaining or enhancing wetland ecosystem services.
- Applying the Wise Use principle allows to maintain and restore wetland ecosystem services.

The European Union inspired by Stern Review of the Economic of Climate Change and expressed the need to explore on the economics of the loss of ecosystems and biodiversity. The lack of valuation of nature is an underlying cause for the observed degradation of ecosystems and the loss of biodiversity. The EU started the valuation project and as a phase I have prepared a report on the economics of ecosystems and biodiversity. Major findings are that our well-

[1] http://www.millenniumassessment.org/documents/document.358.aspx.pdf
[2] http://ec.europa.eu/environment/nature/biodiversity/economics/pdf/teeb_report.pdf

being is dependent on the continued flow of ecosystem services. Policy makers need tools to incorporate true value of ecosystem services into their decisions. Most ecosystem services are public goods that have no price. Tradable values will need to be attached to these services. Payments for ecosystem services can create demands to correct biodiversity and ecosystem harm.

Ramsar 10th Conference of Parties will be held in South-Korea, 2008: All relevant material can be found.from www.ramsar.org -pages Here are some important draft resolutions mentioned:

- The Changwon Declaration presents an overview of priorities how to deliver some of the world's most critical environmental sustainability goals. It is our call to action. Everyone has a stake in the outcomes supported in the priority areas addressed by the Declaration
- Water and wetlands An urgent need to change water governance. Our increasing over-use of water jeopardizes human well-being and the environment.
- Climate change and wetlands Wetlands are vital natural infrastructures we need for mitigation and adaptation to climate change.
- People and wetlands Wetland benefits need to be sustained for economic development and the livelihoods of poor people.
- Health and wetlands Interrelationships between ecosystems and human health need to become key components of policies, plans and strategies.
- Land use change must integrate the values that wetlands provide for people and biodiversity.
- Planning and decision-making need to be based on comprehensive cost-benefit analyses and enhanced wetland knowledge, data and information.

Salathé also highlighted Ramsar´s World Wetland Day. The theme for 2009 will be Upstream-downstream -Wetlands connect us all. There will more to follow shortly on Ramsar www-pages. Salathé raised the question how are Nordic-Baltic countries going to make use of it?

When asked about the United Nations Convention on Biological Diversity (CBD) Freshwater programme, Salathé responded that it same as Ramsar.

EU Water Framework Directive and wetland conservation

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In the reports, handbooks and other material produced by the Ramsar co-operation a wide perspective has been taken in the definition of wetlands. Also lakes and rivers are understood to be covered by the Ramsar definition of wetlands in their entity, regardless of their depth. This means that also aspects of water protection are, or at least should be, included in the Ramsar co-operation.

There are many important reasons to conserve wetlands, the world's most productive environments, which effect in many ways on the hydrological and biogeochemical characteristics of the river drainage basins. Wetlands also provide many valuable economic benefits, so called Ecosystem Services, to people in the drainage basins. One of these is water purification. We have estimated that in a river basin characterized by a high proportion of peatlands in Northern Finland it is by the effective use of a water pollution control wetland type alone, wetland constructed on peatland, possible to achieve about 30% decrease in the Tot.P and Tot.N non-point source loadings, which is half of the total anthropogenic loading to the river. Peatland suitable for construction of this water pollution control wetland type can be found all over the river basin, where the loading originates mainly from non-point sources scattered widely over the area, such as forestry and agriculture. The results in terms of water protection could be still better, if also the other types of water pollution control wetlands developed, such as wetlands constructed in mineral soils, shallow ponds etc., were used as effectively as possible.

The EU Water Framework Directive (WFD) is in many ways based on integrated approach in river basin management: 1) Based on the knowledge on the character of the river ecosystems the river basins are approached as entities, 2) Knowledge on many areas of river ecology, biogeochemistry and environmental engineering is used in decision making, 3) Also the factors describing the ecological status, not only those describing the chemical quality of water, are taken into account in river status assessment, 4) All sources of loading as well as the natural leaching are taken into account in identifying reasons for the status of the river, seeing also that the impact area of loading is the whole river channel downstream the loading source, and 5) A River Basin Management Co-operation Group, representing all interested parties, has been established in each River Basin District for the planning and implementation of the River Basin Management Plan. Eight River Basin Districts have been established in Finland, three of them being international. The Liminganlahti Bay Area, the other Excursion Site of this seminar, is in the River Basin District of River Oulujoki – River Iijoki - Bothnian Bay in Northern Finland.

We are planning now the first implementation period 2010-2015 of the WFD. This work has brought out many needs of development in the planning and realization processes of water protection: 1) Co-operation between land-use

and water authorities should be developed further, 2) Practical planning tools developed for estimating as well the needs for decreasing loading as the effects of different water protection methods on water quality in the different parts of river basins should be used and developed further, 3) Planning of water pollution control wetlands in total drainage basin scale should be developed further, 4) Environmental awareness of the River Basin Management Co-operation Groups both on water pollution control wetland structures and on the importance of wetlands in river drainage basins, as well as needs of wetland conservation, should be increased, and 5) Cross-use of different water pollution control wetland structures developed for different loading sources should be increased. Finding solutions for these needs can be expected to increase intensively the cost-efficiency of diffuse source pollution control in river drainage basins. We should also consider if it under the WFD implementation were useful to establish a national "Wetland Group" for contributing this work of development.

The Fourth Meeting of NorBalWet experts - Conclusion

Kempele, Finland 23rd-25th of September, 2008

Wetland experts from six countries (Estonia, Finland, Latvia, Norway, Russia and Sweden), Ramsar Secretariat and the Wetlands Links International (WLI) participated in the seminar *Networking with wetland managers in Nordic-Baltic countries* organised by Finnish Ministry of the Environment and Metsähallitus, Finland.

Main themes focused at the seminar included i) wetland conservation and implementing of the Ramsar Convention, *inter alia* a summary of assessment of threatened wetland habitat types in Finland, Regional wetland strategy from Sweden and example of networking with other multilateral environment agreement, HelCom, ii) management planning of Ramsar sites, including a review of available planning tools, a summary of the status in the Nordic-Baltic countries and case studies from selected sites, iii) selected lessons learnt from recent wetlands projects were also reviewed. Also key messages from the Millennium Environment Assessment, The economics of ecosystems and biodiversity and EU Water Framework Directive were concerned. Two field excursions were organised to Ramsar sites of Liminganlahti Bay and Martimoaapa mires.

As a follow up from the seminar the NorBalWet member countries were urged to:

- increase their efforts to develop, update and implement adaptive management plans for their Ramsar sites
- finalize updating of Ramsar Information Sheets (RIS) for all their Ramsar sites within 2009
- clarify the situation for Ramsar sites at risk and send final reports to the Secretariat (Denmark/Greenland, Iceland, Norway and Sweden)
- remember also the six conclusions from Lepanina, 2007 seminar on monitoring wetlands, *inter alia "It is important to create more synenergy between management and monitoring practices related to different conventions and directives - Ramsar, Natura 2000, WFD, Helsinki Convention etc."* While monitoring provides essential feedback for adaptive wetland management.

Also member countries were asked to support:

- delivering the Ramsar Convention by designating required national focal points
- establishing of wetland/Ramsar committee
- cooperation between other sectors (*inter alia* water), multilateral environment agreements, NGOs and NorBalWet
- further development and active participation of the NorBalWet web pages to provide information from countries, relevant projects etc.
- development of a contact network of Ramsar site managers

The participants asked the Coordination group of NorBalWet to look further into:

- finalizing the establishment the NorBalWet network
- selecting the suitable date for World Wetlands Day celebrated in NorBalWet member countries
- possibilities to fund Follow up report for Nordic wetland conservation TemaNord Environment 2004:506 report

Agenda

Tuesday 23 September

Aim: Following questions to be discussed: Where we are in wetland conservation? What is the role of the Ramsar Convention in European wetland conservation? What is expected from the contracting parties of the Convention? Are we doing well in wetland conservation and implementing the Convention? How we could work together with other multilateral environmental agreements?

Welcoming words (15 min)
Tiina Niikkonen, Metsähallitus, Finland

1. Where we are in wetland conservation? (20 min)
   - Threatened wetland types in Finland. Results from the first national assessment of threatened habitat types. www.ymparisto.fi >Publications >The Finnish Environment >The Finnish Environment 2008 >SY8/2008 Assessment of threatened habitat types in Finland (Summary in English).
     Kaisu Aapala, Finnish Environment Institute, Finland

2. Implementing the Ramsar Convention in Nordic-Baltic countries (30 min)
What is the Convention all about?
   - How well Nordic-Baltic countries are implementing the convention? - Synthesis of National Reports 2005-2008
     Tobias Salathé, Ramsar Convention Secretariat

3. Synenergy between different tools for Wetland conservation in Nordic-Baltic Countries (The Ramsar Convention, national conservation programmes, Natura 2000, other Multilateral Environmental Agreements)
   - Regional wetland strategy: Case study Sweden (20 min)
     Henrik Sporrong, County Administration in Västerbotten, Sweden
   - Towards ecologically coherent networks of protected areas: tools and steps on the journey, www.helcom.fi (20 min)
     Samuli Korpinen, Baltic Marine Environment Protection Commission

4. Discussion

5. Wetland Excursion to Ramsar site: Liminganlahti Bay Area (No 1523)
   Visiting Nature Centre of Liminganlahti and Virkkula bird tower
   Guide Ulla Matturi

Dinner

Wednesday 24 September

Aim: The Convention recognizes that i) the designation of Ramsar site provides just the starting point and ii) development and implementation of management planning process is necessary and should be applicable to all wetlands for securing the sustainability of wetlands and maintenance of ecosystem services. Are Ramsar tools for management planning useful in Nordic–Baltic countries? What is the status of

management planning in Nordic-Baltic countries? How management planning processes are implemented in Finland? Do we have resources enough to fulfil good management planning and implementing processes?

1. Ramsar tools for management planning: Ramsar Handbook 16 (30 min)
Further information see http://www.ramsar.org/lib/lib_handbooks2006_e.htm
Tobias Salathè, the Ramsar Convention Secretariat

2. Status of management planning in Nordic-Baltic countries (10 min/country)
Short presentations from each country: Estonia, Finland, Latvia, Norway, Russia and Sweden

3. Discussion

4. Monitoring the effects of restoration on Finnish peatlands. Experiences and plans for the state-owned protected areas. (30 min)
Tuomas Haapalehto, Metsähallitus, Finland

5. Case study: Management plan of the Ramsar site: Martimoaapa-Lumiaapa-Penikat mires (No 11) (30 min)
Esa Härkönen, Metsähallitus, Northern Finland, Finland

6. Case study: Management plan from Finnish Ramsar site: Liminganlahti Bay (No 1523) (30 min)
Jorma Pessa, North Ostrobothnia Regional Environment Centre, Finland

7. Discussion

Lunch

Excursion to Ramsar site of Martimoaapa-Lumiaapa-Penikat mires (No 11)
Bus to the site will take 1,5 hours , *guides Esa Härkönen, Päivi Paalamo, Pentti Rauhala*

Dinner

Sauna

Thursday 25 September

Aim is to exchange information about recommendations and lessons learnt from the latest wetland projects. How project results and outcomes can serve as examples and models, how to distil lessons learnt while executing projects, how to disseminate the recommendations and how to transfers such know-how knowledge to others? 20 minutes is reserved per presentation.

1. Interreg IIIB –project: BIRD – wetlands, nature reserves and cultural landscapes for rural development (2004-2007*), http://www.eurowetlands.org*
Mr Johan Jannert, County Administration of Västra Götalands län, Sweden

2. EU Life project: Implementation of Mire habitat management plan for Latvia, *http://www.ldf.lv/pub/?doc_id=27928 (2004-2008)*
Ms. Mara Pakalne, project leader, Latvia

3. Examples and experience from management of a coastal Ramsar Site - Jæren Wetlands System
Mr Vegard Ankarstrand Larsen, Senior Engineer, County Governor of Rogaland, Norway

4. Interreg IIIA –project: Nature values and management of reed beds and coastal meadows in Finland and Estonia (2005-2008), *www.ruoko.fi*
Mr Iiro Ikonen, Southwest Regional Environment Centre

5. The review of Ramsar sites in North West Russia
Sergei Rezvyi, Baltic Fund for Nature, Saint Petersburg, Russia

6. Cooperative management of the North Livonian Transboundary Ramsar Site
Agu Leivits, State Nature Conservation Centre, Pärnu-Viljandi region, Estonia

7. Using wetland networks to support wetland delivery- how best to operate a network with minimal bureaucracy and maximum efficiency
Chris Rostron, Head of Wetland Link International, WWT London Wetland Centre, England, wwt.org.uk

8. Presentation of www.norbalwet.org
Alistair Brown, Randsfjordmuseene Ltd, Norway

Morning coffee

9. Short introduction to the current themes, (30 min)
Messages *inter alia* from Ecosystems and human well-being: wetlands and water – A Report of Millennium Ecosystem Assessment
The economics of ecosystems & biodiversity, Interim Report, 2008
Convention Biological Diversity: Freshwater Programme
Tobias Salathè, the Ramsar Convention Secretariat

10. EU Water Framework Directive and wetland conservation (20 min)
Kaisa Heikkinen, Finnish Environment Institute, Finland

Discussion

Closure of the seminar

Lunch

Participant list

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