

Aquatic restoration in Sweden

- objectives and implementation



Erik Årnfelt – Swedish Agency for Marine and Water Management

Matti Ermold – Swedish Environmental Protection Agency

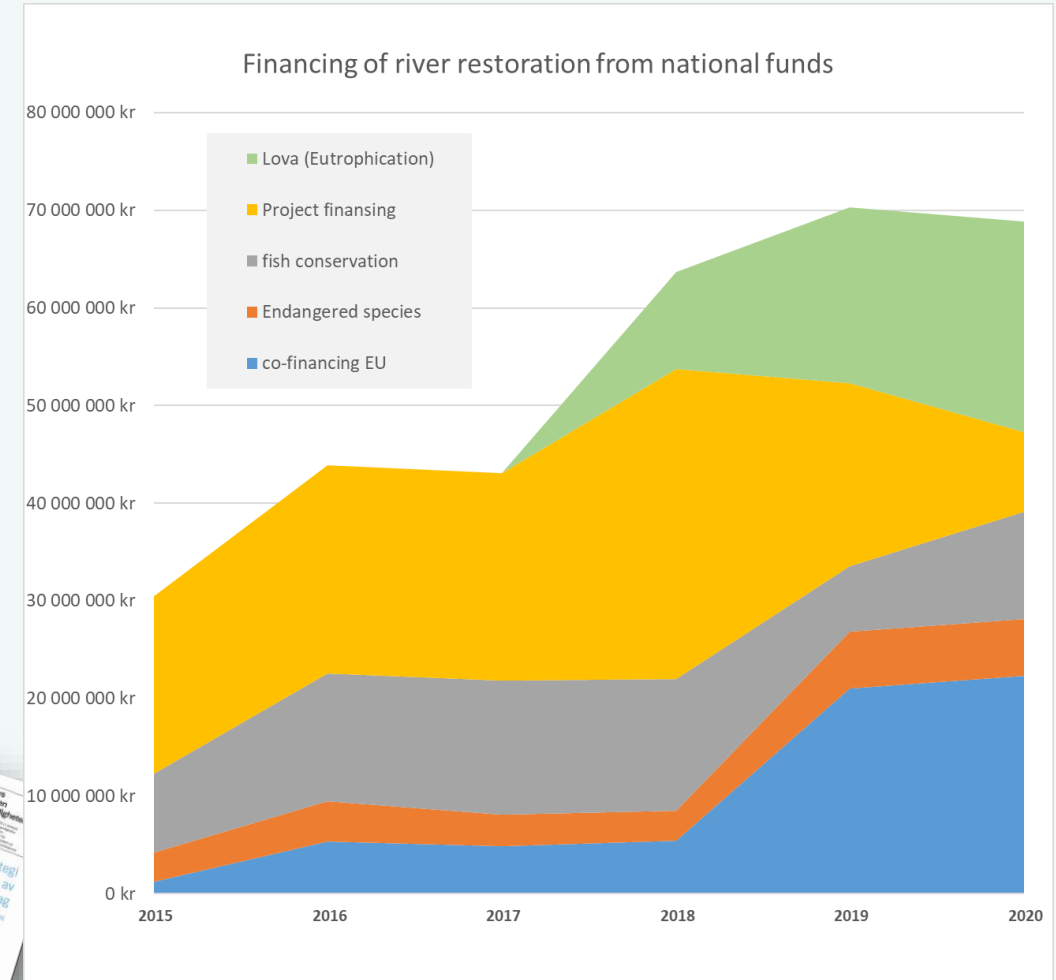
Ingemar Näslund – Countyboard of Jämtland

Swedish Agency
for Marine and
Water Management



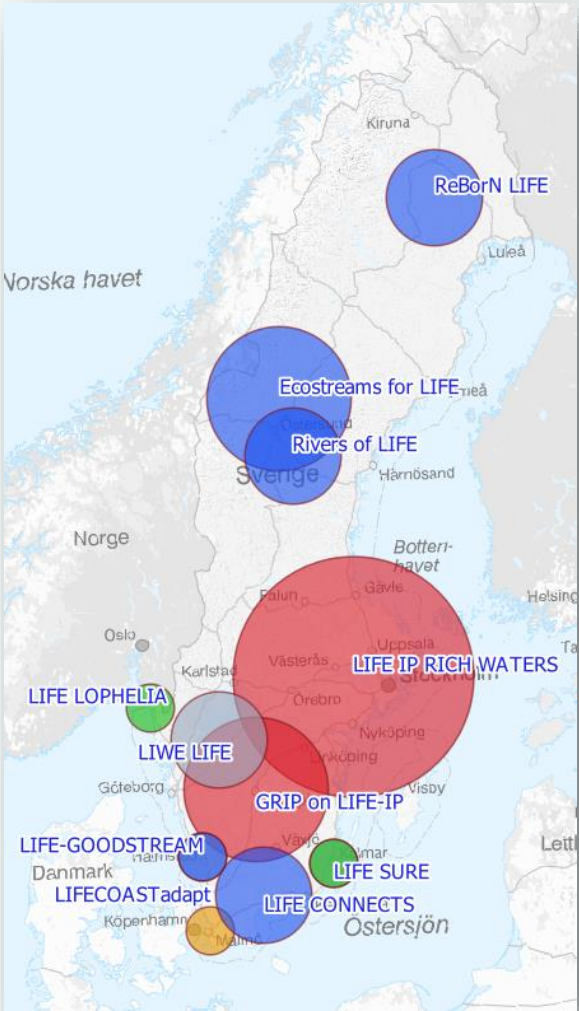
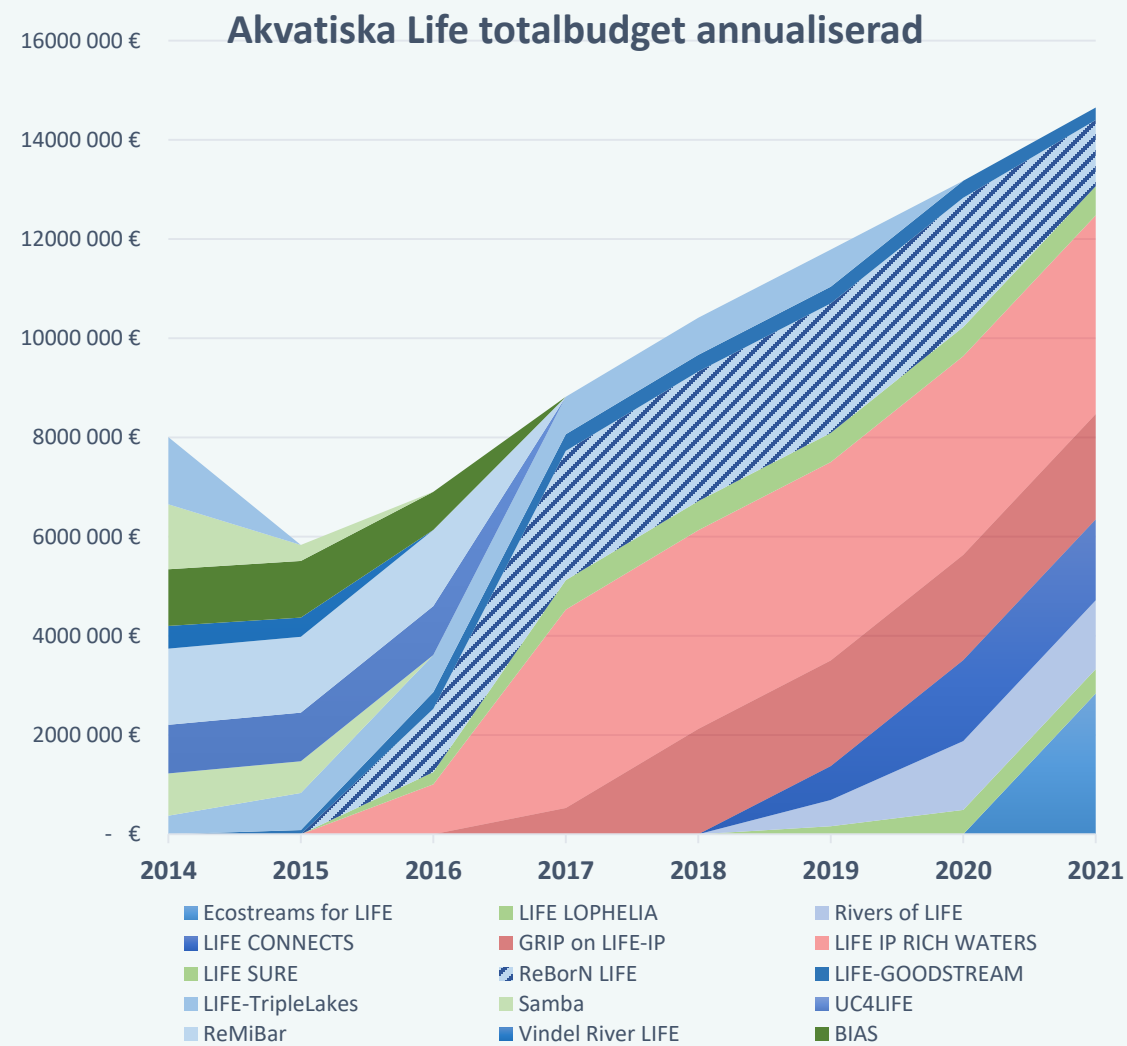
Some key facts about river restoration in Sweden

- » Swedish Agency for Marine and Water Management
 - protect, restore and ensure sustainable use of freshwater resources and seas
 - responsible for lakes and rivers, not wetlands or adjoining land
 - NO dedicated budget for water-restoration but
 - provides about 70 million/year to the county administrative boards which is used for river restoration
 - EU/Life 11 running project, total 150 million kr / y
 - An obsolete strategy (2007) from the Swedish Environmental Protection Agency



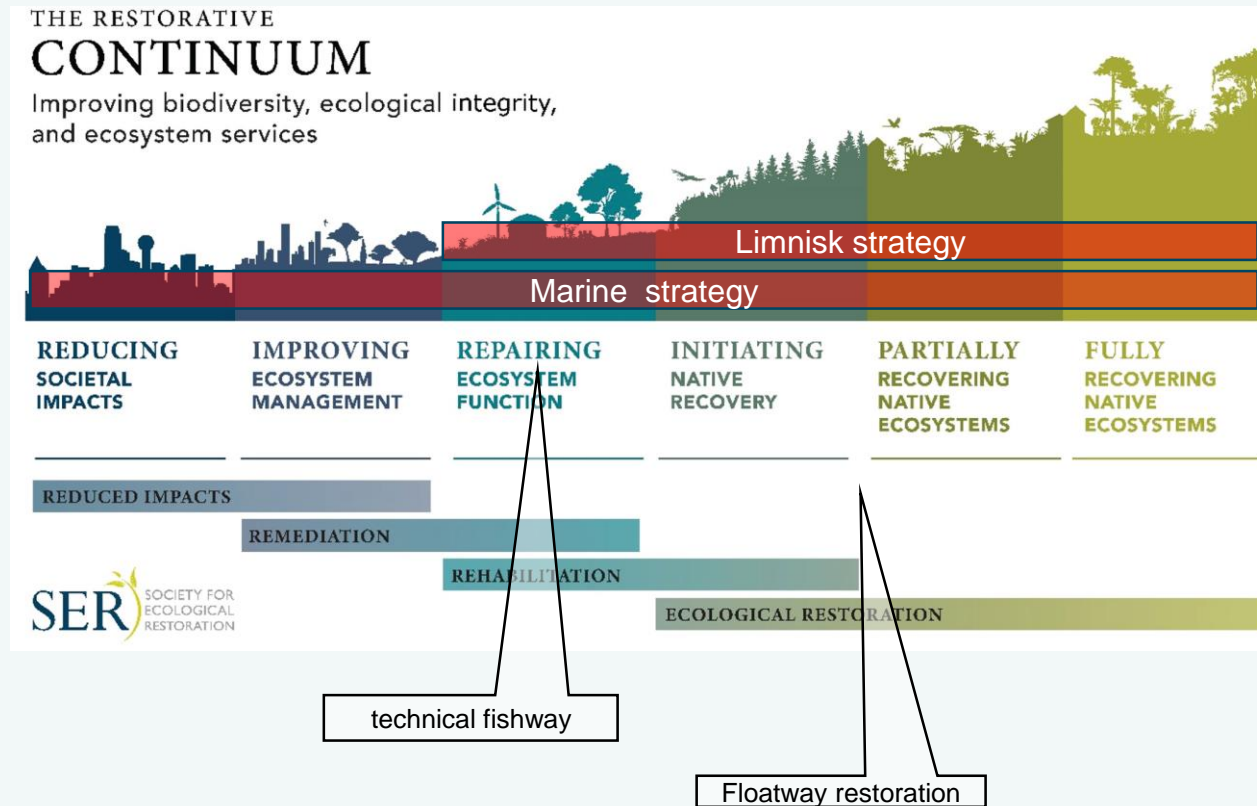
Active Life-project

Swedish Agency
for Marine and
Water Management



Working on a new restauration strategy

- » Developed during 2021-2022
- » Linked to the implementation of the biodiversity strategy
- » SER's system for ecological restoration
 - focus on measures not management
- » Landscape / catchment area
- » Has to work without long-term and stable funding
- » Two parts,
 - strategy with goals,
 - framework for implementation



**Havs
och Vatten
myndigheten**



Wetland restoration in Sweden

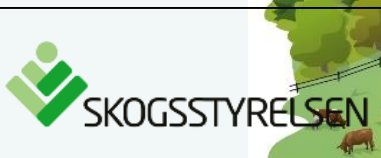


Wetland facts Sweden

- » 6 Mha wetland (8-10% of land area)
- » ~2 Mha wetland lost ~250 years

Naturtyp		Samlad bedömning 2013 resp. 2019					
EU-kod	English name	Alpin		Boreal		Kontinental	
		2013	2019	2013	2019	2013	2019
7110	Raised bog			=	-	-	-
7120	Degraded Raised bog			-	-	-	-
7130	Blanket bog	=	=				
7140	Transition mire	=	=	-	-	-	-
7160	Mineral rich springs and springfens	=	=	-	-	=	-
7210	Calcareous fens			=	=	=	=
7220	Petrifying springs			=	=	=	-
7230	Richfens	=	=	-	-	-	-
7240	Alpine pioneer formations	=	=				
7310	Aapa mire	=	=	=	=		
7320	Palsamire	-	-				

» Water restoration – many actors.....



Europeiska jordbruksfonden för landsbygdsutveckling: Europa investerar i landsbygdsområden





Challenges and ways forward

- Many players involved
- Difficult to follow up if restoration leads to fullfilment of WFD or Birds and Habitat directive

» But.....

- Increased funding for wetland restoration 2018 - 2023 in total close 1Bn SEK
 - Focus on restoration in protected areas and on multifunctional wetlands (municipalities)
 - Focus on restoration of former agricultural land on peat soils
 - Focus on strengthening cooperation between agencies, improve digital solutions for impact assesment and planning of wetland restoration

Picture: Emil Pagstedt Andersson Länsstyrelsen i Örebro

Wetland restoration





SWEDISH ENVIRONMENTAL
PROTECTION AGENCY

LIFE in SWEDEN

River restoration funded by the EU

LIFE-program

Ingemar Näslund
County Administrative Board,
Jämtland













Swedish LIFE projects

Actions:

- » Stream restoration after timber floating
- » Connectivity – dams and road culverts
- » Reintroduction of river pearl mussel
- » Development of management plans for sustainable fishing
- » Restoring wetland hydrology
- » Water friendly forestry - dialogues
- » Introduction of kids and recently arrived immigrants to Natura 2000 and nature conservation
- » Transfer and replication and heaps of dissemination activities
- » Removal of hydropower stations

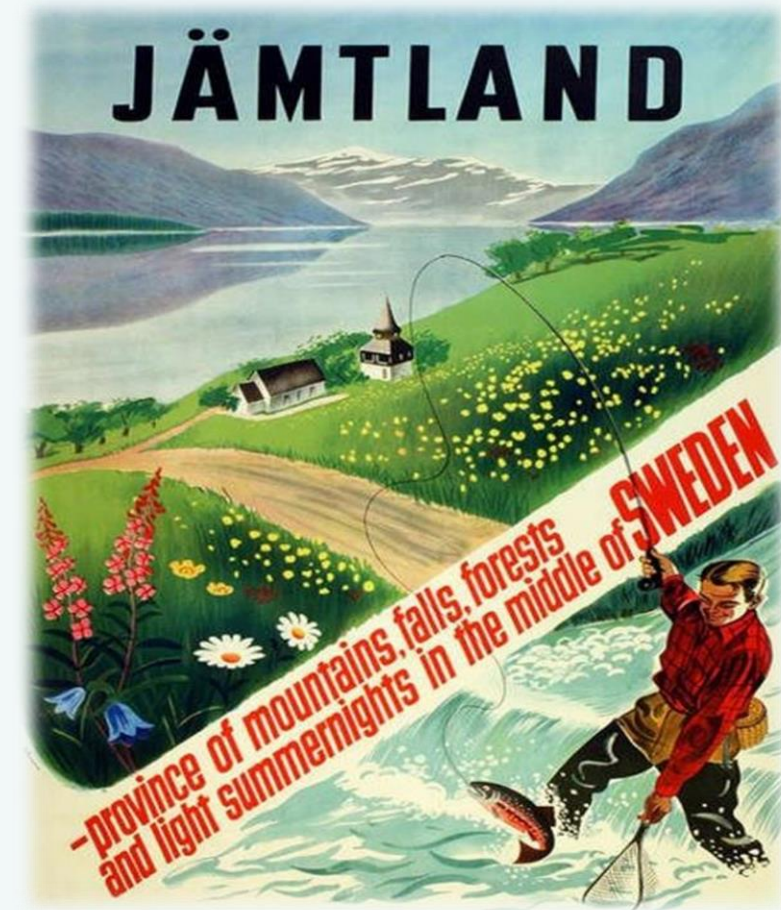


	Rivers of LIFE	LIFE Ecostreams	LIFE Connect
Duration	2019-2025	2021-2026	2019-2025
Partners	CAB Gävleborg, Forestry companies Municipalities Swedish Forest Agency Swedish Agency for Water and Marine Management Swedish AnglersAssoc. Landowners	CAB Västerbotten and Västernorrland Forestry companies Municipalities Swedish Transport Agency Swedish Agency for Water and Marine Management Karlstad univ., Munchen univ., Swedish Anglers Association Landowners	County boards, Klippan municipality, hydro Uniper (Power company), Karlstad and Lund university, Swedish Anglers association, Swedish Agency for Water and Marine, Landowners
Watershed	Gimån, Ljusnan, Voxnan	Indalsälven (Åre), Ammerån, Rörströmsälven, Moälven, Öreälven	Rönne å, Mörrumsån, Emån, Helge å, Verkeån, Virån, Alsterån
Money (Euro)	8 331 204	17 038 931	c. 9 000 000
Coordinating Project leader	County Gävleborg Peter Mathisen	County Västerbotten Johanna Häggglund	County Skåne Ivan Olsson

Why LIFE-projects?

- » Best way to meet the requirements of the WFD
- » Minor national and regional financing available
- » Good value for money in river restoration
- » Jobs for local people
- » Skill development for local entrepreneurs
- » Knowledge development in the field of restoration and conservation

and



Questions

- » River and lakes
 - Erik Årnfelt – Swedish Agency for Marine and Water Management
- » Wetlands
 - Matti Ermold – Swedish Environmental Protection Agency
- » Life i Jämtland
 - Ingemar Näslund – Countyboard of Jämtland