Article Title: Rethinking Stakeholder Engagement in European Wetland Restoration: A Systematic Literature Review

Journal: Wetlands Ecology and Management

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Appendix A. Information about the grey literature search

A1. Search terms used for the targeted grey literature search

Following the systematic database search, Swedish restoration initiatives represented the largest national group within the peer-reviewed evidence base. To complement this evidence, a targeted search of Swedish grey literature was undertaken using combinations of Swedish and English search terms. The search was designed to identify reports addressing stakeholder engagement, policy, governance and implementation of wetland restoration in Sweden. Searches were conducted primarily using Google Scholar, Google and the websites of relevant Swedish authorities and organisations.

Swedish search terms:

- intressenternas engagemang i våtmarksrestaurering
- intressenternas deltagande i våtmarksrestaurering
- våtmarksrestaurering + politik
- våtmarksrestaurering i Sverige
- jordbruksmiljöprogram för återställande av våtmarker i Sverige

- Återställ våtmarker

English search terms:

- Wetland restoration policy in Sweden
- Wetland restoration funding in Sweden
- Agri-environmental schemes for wetland restoration in Sweden
- Wetland rehabilitation in Sweden
- Peatland restoration in Sweden
- Stakeholder participation in wetland restoration in Sweden

The retrieved reports were screened using the same eligibility criteria applied to the peer-reviewed literature. Three reports met the inclusion criteria and were included in the review (Alström et al., 2000; Andersson, 2012; Elofsson et al., 2021).

A2. Grey literature sources

The targeted grey literature search included searches of:

- Google Scholar;
- Google;
- Swedish Environmental Protection Agency (Naturvårdsverket);
- Swedish Board of Agriculture (Jordbruksverket);
- County Administrative Boards (Länsstyrelserna); and
- Other relevant Swedish governmental and research organisations where appropriate.

Appendix B. Evidence extracted from the included peer-reviewed studies

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
Aggestam (2014)	Catchment-based wetland restoration in the Kävlinge and Höje River catchments, Sweden, to reduce nutrient runoff, improve water quality, enhance biodiversity and recreation. Restoration relied on voluntary landowner participation.	Landowners, municipal authorities, consultants, researchers, County Administration, environmental organisations and fishing associations.	Landowners participated voluntarily through negotiated restoration agreements. Consultants negotiated wetland design with landowners, while Programme Boards, Working Groups and a multi-stakeholder Reference Committee supported collaborative planning. Restoration designs were modified through stakeholder negotiations.	Inter-municipal governance involving Programme and Executive Boards, Working Groups, a multi-stakeholder Reference Committee and consultant-led coordination, supported by the EU LIFE programme.	Differences in stakeholder values shaped restoration decisions. Negotiated compromises facilitated participation but sometimes reduced the ecological effectiveness of restoration measures.
Aklilu and Elofsson (2022)	National study of voluntary wetland creation and restoration under Sweden's CAP-funded Rural Development Programme.	Agricultural landowners, neighbouring landowners, Swedish Board of Agriculture, County Administrative Boards, advisory	The study does not examine stakeholder engagement directly. It analyses voluntary landowner participation in the investment support scheme and suggests that advisory networks, social learning and informal	Wetland implementation was governed through the CAP-funded Rural Development Programme administered by the Swedish Board of Agriculture and County Administrative Boards using	Higher financial incentives and neighbourhood spillover effects increased voluntary adoption of wetland restoration, suggesting that policy incentives and informal social diffusion may encourage participation.

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
		organisations and farmer networks.	information exchange may influence adoption.	financial incentives and contractual arrangements.	
Blicharska and Rönnbäck (2018)	NGO-led restoration of coastal wetlands ("pike factories") in eastern Sweden to improve fish spawning habitats, biodiversity and water quality through collaboration with private landowners.	Swedish Anglers Association, private landowners, municipalities, County Administrative Boards, Swedish Agency for Marine and Water Management, contractors and environmental authorities.	The Swedish Anglers Association coordinated restoration by identifying sites, engaging landowners, securing funding and permits, and overseeing implementation. Landowners voluntarily participated by providing access to their land and, where applicable, committing to long-term wetland management. Collaboration with public authorities supported project delivery.	Restoration was coordinated by the Swedish Anglers Association with financial support from municipalities, County Administrative Boards, the Swedish Agency for Marine and Water Management and the EU Rural Development Programme. Restoration was subject to permitting requirements and environmental regulations.	Successful restoration depended on trust, adaptive collaboration and landowner willingness to participate. Policy support and cooperation with authorities facilitated implementation, while short-term funding, permitting complexity and legal constraints limited long-term restoration efforts. Landowners were motivated primarily by environmental stewardship rather than financial incentives.
Cortina-Segarra et al. (2021)	Europe-wide expert assessment of barriers to ecological restoration across multiple ecosystem types to support	Restoration practitioners, researchers, government agencies, NGOs, landowners, private	Experts identified stakeholder participation, collaboration, knowledge exchange and landowner involvement as essential components of effective	Effective restoration was framed as requiring integrated land-use planning, coordinated multi-level governance, enabling policy frameworks	Experts identified conflicting stakeholder interests, fragmented governance, inadequate funding and weak collaboration as major

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
	implementation of the European Biodiversity Strategy for 2030.	sector actors and policy-makers.	ecological restoration, while weak collaboration and limited societal engagement were recognised as major barriers.	and participatory governance throughout restoration planning and implementation.	barriers to restoration, and recommended strengthening participatory governance and cross-sector collaboration to improve restoration outcomes.
Franzén et al. (2015)	Catchment-based water management in the Kävlinge and Rönne River catchments, Sweden, implementing wetlands, buffer zones and other water quality measures under the EU Water Framework Directive through voluntary participation.	Municipalities, farmers and landowners, water associations, water councils, County Administrative Boards, regional water authorities, consultants, NGOs, researchers and industry representatives.	Stakeholder engagement was organised through water associations, water councils and inter-municipal collaboration. Farmers voluntarily participated in wetland creation and buffer zone establishment with technical, administrative and financial support. Consultants facilitated site selection, negotiated restoration measures and supported implementation, while water councils promoted collaboration, planning	Restoration was coordinated through inter-municipal agreements, water associations and water councils with defined organisational responsibilities, consultant support and long-term funding arrangements under the Water Framework Directive.	Effective stakeholder engagement depended on committed organisations, stable funding, institutional flexibility, clear leadership and voluntary farmer participation supported by practical assistance. Differences in institutional capacity and organisational commitment explained contrasting restoration outcomes between the two catchments.

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
			and knowledge exchange among stakeholders.		
Geranmayeh et al. (2024)	Voluntary wetland creation and restoration on private agricultural land in Sweden through the Greppa Näringen advisory programme, supported by national and EU funding schemes.	Agri-environmental advisors, farmers and landowners, County Administrative Boards, municipalities, Swedish Board of Agriculture, Swedish Federation of Farmers, catchment officers and funding agencies.	Advisors supported landowners through dialogue, collaborative planning, site visits, technical and administrative guidance, funding advice and long-term relationships. Engagement emphasised mutual learning, trust, recognition of landowner motivations and practical support throughout wetland planning and implementation.	Wetland restoration was supported through advisory services operating within the Rural Development Programme and complementary funding schemes, with advisors acting as intermediaries between landowners and public authorities. Catchment officers strengthened collaboration between municipalities and landowners.	Trust-based advisor–landowner relationships, mutual learning and continuous support facilitated voluntary wetland restoration. Administrative complexity, fragmented funding, inconsistent permitting and insufficient long-term support constrained participation, while improved coordination, simplified procedures and sustained advisory support were identified as priorities for increasing restoration uptake.
Goosen and Vellinga (2004)	Comparative analysis of inland freshwater wetland restoration projects in the	National and local governments, water boards, municipalities,	Stakeholder engagement involved communication, collaborative planning, negotiation and conflict	Restoration required coordination among multiple organisations responsible for water	Conflicts between national and local priorities, fragmented institutional coordination and

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
	Netherlands undertaken within integrated catchment-based water management.	nature conservation organisations, farmers, landowners, local residents, planners and scientists.	resolution among governmental organisations, local stakeholders and landowners. Early participation and collaboration were promoted to improve restoration planning and implementation, while compensation schemes supported acceptance where restoration affected stakeholder interests.	management, nature conservation, spatial planning and land use, but fragmented institutional responsibilities frequently constrained implementation.	competing stakeholder interests constrained restoration. Early stakeholder participation, collaborative planning, negotiation and appropriate compensation were identified as important for improving implementation, although participation alone did not guarantee consensus.
Grygoruk and Rannow (2017)	Climate-adapted wetland management in Biebrza National Park, Poland, supported through development of a Climate-Adapted Management Plan.	National Park administration, farmers, landowners, local authorities, environmental agencies, NGOs, scientists, park managers and local communities.	Stakeholder engagement was organised through science–management partnerships, stakeholder forums, consultation, collaboration, tailored communication and continuous dialogue. Stakeholder feedback informed adaptive management planning and	Adaptive management operated within protected-area governance structures led by the National Park administration, with stakeholder consultation integrated into management planning but final decisions constrained	Tailored communication, stakeholder segmentation, mutual learning and locally relevant information strengthened stakeholder engagement, while institutional rigidity, legal constraints, limited understanding of scientific uncertainty and weak stakeholder interaction

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
			promoted mutual learning and awareness of climate-related management challenges.	by statutory responsibilities.	constrained adaptive wetland management. Boundary-spanning and iterative learning were identified as important for improving adaptive management.
Gumiero et al. (2013)	Review of European river and floodplain restoration projects undertaken to restore wetland functions, reduce flood risk and improve biodiversity within EU environmental policy frameworks.	Government agencies, river basin organisations, municipalities, farmers, landowners, drainage consortia, conservation organisations, scientists, local communities and public–private partnerships.	Stakeholder engagement varied across restoration contexts and included participatory planning, public meetings, stakeholder consultation, farmer partnerships, public–private partnerships and bottom-up participation. Communication and collaboration supported restoration planning and implementation.	Restoration was implemented through multi-level institutional arrangements linking European policies, river basin organisations, public authorities and local partnerships, with approaches differing according to national contexts.	Restoration benefited from context-specific stakeholder engagement that balanced ecological, agricultural and flood-management objectives through collaboration, communication and farmer partnerships. Limited stakeholder engagement reduced implementation effectiveness in some restoration projects.
Hahn et al. (2006)	Adaptive management and restoration of Kristianstads	Farmers, landowners, EKV, Municipality of Kristianstad, County	EKV facilitated stakeholder engagement through trust-based relationships,	A flexible bridging organisation connected local stakeholders with	Trust, long-term relationships, collaborative learning, knowledge

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
	Vattenrike wetlands, Sweden, through collaborative ecosystem management.	Administrative Board, Swedish EPA, WWF, local organisations, researchers and local businesses.	dialogue, collaborative learning, project-based collaboration, knowledge exchange and adaptive management. Flexible project teams, demonstration projects and communication encouraged voluntary participation and expanded stakeholder involvement.	municipal, regional, national and international institutions through cross-scale partnerships, informal networks, project-based collaboration and diversified funding.	exchange and organisational flexibility strengthened stakeholder engagement in wetland restoration. Demonstration projects, peer learning and continuous communication broadened participation, while formal institutions reinforced achievements initiated through voluntary collaboration.
Hammer et al. (2011)	Wetland creation and restoration under the EU Water Framework Directive in the Northern Baltic Sea River Basin District, Sweden.	Water authorities, municipalities, water councils, farmers, landowners, local stakeholders and regional authorities.	Stakeholder engagement centred on consultation, local participation, collaborative planning, voluntary implementation of restoration measures, incorporation of local ecological knowledge and social learning through water councils and	Multilevel governance linked EU, river basin, regional and local institutions, with municipalities and water councils facilitating local implementation despite limited authority and resources.	Successful wetland restoration depended on voluntary participation by landowners, integration of scientific and local knowledge, effective communication across governance levels, and institutional arrangements that support collaboration,

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
			multilevel governance arrangements.		negotiation and adaptive management.
Hansson and Kokko (2018)	Farmer experiences following restoration of Lake Hornborgasjön, Sweden.	Farmers, landowners and environmental authorities.	Farmers perceived limited consideration of local knowledge, weak communication, unequal treatment by authorities and limited institutional accountability, leading to mistrust and low acceptance of restoration outcomes.	Government-led restoration imposed land-use restrictions through a predominantly top-down governance approach characterised by unequal authority and limited procedural legitimacy.	Long-term stakeholder acceptance depended not only on ecological outcomes but also on procedural fairness, trust, recognition of local knowledge, transparent communication and institutional responsiveness to farmers' concerns.
Hansson et al. (2012)	Voluntary wetland creation in Swedish agricultural landscapes under agri-environment schemes.	Private landowners, environmental authorities and extension agencies.	Participation was encouraged by financial incentives, practical support, knowledge, positive peer experiences and perceived multiple benefits, while barriers included loss of productive land, administrative complexity, limited follow-	Government-funded voluntary restoration programmes relied on subsidies and advisory support. The authors advocate a shift towards performance-based incentives that reward ecosystem service provision	Successful engagement requires more than financial compensation; sustained participation depends on trust, continuous communication, institutional support, knowledge exchange, feedback on restoration outcomes and recognition

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
			up and uncertainty about restoration outcomes.	and strengthen long-term engagement.	of landowners as active partners in ecosystem service delivery.
Kininmonth et al. (2015)	Landscape-scale governance of interconnected wetlands in Stockholm County.	Municipal councils responsible for wetland management.	Collaboration occurred primarily through inter-municipal coordination, with coordinating actors facilitating governance across administrative boundaries where wetlands were ecologically connected.	A network governance framework assessed the alignment between ecological connectivity and collaborative governance structures. Coordinating actors played an important role in strengthening governance fit across jurisdictions.	Effective wetland governance requires collaborative structures that reflect ecological connectivity rather than administrative boundaries. Coordination by intermediary actors can strengthen cross-boundary collaboration and improve governance alignment.
Lindahl and Söderqvist (2004)	Catchment-based wetland creation programme in southern Sweden implemented through voluntary agreements with agricultural landowners.	Farmers, landowners, municipalities, County Administrative Board, Ekologgruppen, LRF, scientists, local organisations and the	Stakeholder engagement combined information dissemination, voluntary participation, individual negotiations, collaborative wetland design, long-term leasing agreements and trust-based communication. Ekologgruppen acted as a	A cooperative agreement among nine municipalities supported catchment-scale restoration through municipal and EU funding, voluntary contracts, cross-municipal coordination and a Reference Committee	The Kävlinge River Programme combined voluntary participation, information dissemination, individual negotiations, long-term leasing agreements, financial incentives and mediation by Ekologgruppen to engage

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
		Reference Committee.	trusted intermediary between authorities and landowners.	linking stakeholder groups and scientists.	landowners in wetland creation. Farmers were treated as equal partners in negotiations, while committed local leadership, cooperation among municipalities and a trusted mediating organisation supported programme implementation.
Manolache et al. (2018)	Governance of Natura 2000 wetland protected areas in Romania.	Protected-area administrators, environmental authorities, municipalities, NGOs, private stakeholders, research organisations and local actors.	Stakeholder engagement centred on inter-organisational collaboration, information exchange and collective action within Natura 2000 governance networks. Participation remained concentrated among public organisations, with limited involvement of NGOs and private stakeholders.	Governance networks were coordinated by protected-area administrators but remained largely centralised and dominated by public authorities despite different administrative models.	Limited participation of NGOs and private stakeholders, centralised governance and weak involvement of peripheral actors constrained collaborative governance. Broader stakeholder inclusion, improved information flow and stronger collaboration were identified as priorities for more

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
					participatory Natura 2000 management.
Nita et al. (2018)	Stakeholder participation in the management of Iron Gates Natural Park, a Natura 2000 protected area in Romania.	Local residents, NGOs, protected-area administration, environmental authorities, local authorities, research organisations and private actors.	Engagement included public awareness activities, voluntary participation, organisational collaboration and stakeholder involvement in conservation management. Awareness and participation increased, but NGOs remained weakly involved in decision-making and collaboration.	Management remained predominantly hierarchical despite participatory governance objectives, with public authorities occupying central coordinating roles and NGOs playing limited roles in governance networks.	Increased public awareness and voluntary participation did not translate into greater influence over governance. Limited NGO participation, weak organisational collaboration and centralised decision-making constrained participatory management, highlighting the need for broader stakeholder inclusion and stronger cooperation among governance actors.
Ricart and Rico-Amorós (2022)	Management of El Hondo Natural Park, a coastal wetland where	Public authorities, Natural Park Advisory Board, irrigation communities, farmers, NGOs, social	Stakeholder engagement included participation in decision-making, dialogue, public-private partnerships, negotiation	Wetland management combined public authorities, advisory structures, irrigation organisations and private	Stakeholder engagement was constrained by underrepresentation, power imbalances, conflicting interests and

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
	agriculture and conservation coexist.	movements, municipalities and rural organisations.	and formal agreements. Collaboration depended on stakeholder representation, mutual recognition and willingness to cooperate.	landowners within Natura 2000 and Ramsar governance frameworks.	limited political commitment to participation. Clear participation rules, dialogue, mutual recognition and willingness to collaborate supported agreements and collaborative management, although existing advisory structures were insufficient to overcome unequal influence in decision-making.
Root-Bernstein and Frascaroli (2016)	Wetland restoration and management across diverse wetland sites in the Po Delta, Italy.	Regional authorities, Regional Parks, municipalities, drainage authorities, NGOs, farmers, fishers, hunters, tourism operators, cooperatives, private	Stakeholder engagement included participatory processes, stakeholder negotiations, collaborative management, community participation and coordination across multiple governance levels. Restoration involving multiple	Restoration was implemented through fragmented multi-level governance involving EU programmes, regional authorities, protected areas, local organisations and private landowners.	Stakeholder engagement was strengthened by collaborative governance, community participation, adaptive learning and stakeholder negotiations but constrained by fragmented governance, exclusion of traditional resource users, conflicting

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
		landowners and local communities.	stakeholder groups was associated with more cooperative outcomes.		restoration objectives and lack of coordinated landscape-scale planning. Projects involving multiple stakeholder groups were more likely to achieve both ecological and social outcomes. The authors advocate participatory, biocultural and adaptive governance approaches.
Schultz et al. (2007)	Ecosystem restoration and management in Kristianstads Vattenrike, Sweden, involving wetlands, rivers, forests and sandy grasslands.	Farmers, landowners, hunting and fishing associations, conservation NGOs, village associations, researchers, municipal authorities, County Administrative Board and EKV.	Stakeholder engagement occurred through local stewardship, practical ecosystem management, ecological monitoring, knowledge sharing, collaborative restoration, adaptive management and multi-level collaborative networks coordinated by a bridging organization.	Restoration was supported through multi-level governance in which EKV functioned as a bridging organization connecting local stewardship groups with governmental agencies, NGOs and scientists.	Recognition of local stewardship, bridging organizations, collaborative learning and adaptive management strengthened stakeholder engagement, whereas dependence on volunteer effort, limited institutional recognition and resource constraints limited long-term engagement. Local stewardship contributed substantially to restoration

Study	Restoration context	Stakeholders	Stakeholder engagement	Insitutional and organisational arrangements	Key findings relevant to stakeholder engagement
					implementation, monitoring and knowledge generation.
Söderqvist (2003)	Voluntary catchment-based wetland creation programme in Kävlinge River Programme in southern Sweden involving conversion of agricultural land into wetlands.	Farmers, landowners, municipalities, programme implementers, County Administrative Board and the Swedish Farmers' Federation.	Engagement relied on voluntary landowner participation supported through information, negotiations, compensation, collaborative planning and long-term lease agreements.	Multi-municipality programme implemented through structured negotiations and voluntary agreements while maintaining private land ownership.	Participation depended on both financial and environmental motivations. Communication strategies emphasising personal environmental benefits, visible programme outcomes and positive peer examples strengthened willingness to participate, while inadequate information, uncertainty, bureaucracy and concerns over land use reduced engagement.

Appendix C. Evidence extracted from the included grey literature

Study	Restoration context	Stakeholders	Stakeholder engagement (SE)	Institutional & governance arrangements	Main findings/ implementation lessons relevant to SE
Alström et al. (2000)	Watershed-scale wetland restoration programme across ten municipalities in southern Sweden using voluntary wetland creation and buffer strips in agricultural landscapes.	Municipalities, farmers, landowners, consultants, regional authorities, Water Protection Associations, scientists, environmental organisations and local communities.	Multi-level engagement through political steering committees, municipal working groups, consultant-led negotiations, voluntary contracts with landowners, dissemination activities and collaborative planning.	Catchment-based governance with shared municipal responsibility, consultant facilitation, equal municipal representation and long-term voluntary agreements with landowners.	Successful implementation depended on voluntary participation, trust, effective communication, neutral facilitation, continuous dissemination, long-term funding and adaptive conflict resolution. Participation was strengthened by environmental motivations, peer examples and collaborative watershed governance, while legal uncertainty, inadequate compensation and institutional fragmentation constrained engagement.
Andersson (2012)	National synthesis of wetland implementation and governance in Swedish agricultural landscapes under the Rural Development	Farmers, landowners, CABs, municipalities, national agencies, NGOs, advisory organisations, consultants,	Engagement centred on voluntary participation supported by advisory services, outreach, collaborative planning, permitting consultations, technical assistance, financial	Multi-level governance integrating EU funding, national policy, regional implementation, advisory services and watershed-scale coordination through	Effective engagement depended on trusted long-term relationships with farmers, comprehensive advisory and financial support, institutional collaboration, watershed-scale

Study	Restoration context	Stakeholders	Stakeholder engagement (SE)	Institutional & governance arrangements	Main findings/ implementation lessons relevant to SE
	Programme and complementary funding schemes.	researchers and local communities.	incentives and multi-level institutional collaboration. Organised farmer initiatives and municipality-led watershed projects demonstrated the greatest implementation success.	collaborative institutional arrangements.	implementation and recognition of multiple ecosystem services. Major barriers included fragmented governance, regulatory complexity, insufficient incentives, coordination challenges and narrow policy emphasis on nutrient retention.
Elofsson et al. (2021)	National assessment of ecological compensation for wetland restoration in Swedish agricultural landscapes.	Landowners, farmers, developers, compensation pool operators, environmental authorities, municipalities, researchers and advisory organisations.	Participation focused on voluntary enrolment in restoration programmes supported by financial incentives, communication, advisory support and social learning among farmers.	Multi-level governance combining ecological compensation policy, Rural Development Programme incentives, compensation pools and market-based governance instruments.	Engagement depended on clear institutional rules, adequate incentives, communication and peer-to-peer diffusion through farmer networks. Effective governance requires transparent compensation mechanisms, flexible implementation and institutional support during early implementation.

Appendix D. Characteristics of the included studies and reporting transparency appraisal

D1. Peer-reviewed studies (n = 21)

Study	Country	Restoration context	Study design	Data collection methods	Restoration stage examined	Reporting transparency*
Aggestam (2014)	Sweden	Kävlinge and Höje River catchments – agricultural wetland restoration	Qualitative case study	Interviews, documents	Planning and implementation	High
Aklilu and Elofsson (2022)	Sweden	National Rural Development Programme – agricultural wetland creation and restoration	Quantitative policy/economic analysis	National programme database	Implementation	Moderate
Blicharska and Rönnbäck (2018)	Sweden	Eastern Sweden ("Pike Factory" projects) – coastal wetland restoration	Qualitative case study	Interviews, documents	Planning and implementation	High
Cortina-Segarra et al. (2021)	Multiple EU countries	Ecological restoration initiatives across multiple European ecosystems	Expert survey	Questionnaire	Policy and implementation	Moderate
Franzén et al. (2015)	Sweden	Kävlinge and Rönne River catchments – catchment-based wetland restoration	Comparative case study	Interviews, documents	Planning and implementation	High
Geranmayeh et al. (2024)	Sweden	Greppa Näringen programme – agricultural wetland restoration	Qualitative study	Semi-structured interviews	Planning and implementation	High

Study	Country	Restoration context	Study design	Data collection methods	Restoration stage examined	Reporting transparency*
Goosen and Vellinga (2004)	Netherlands	Integrated freshwater wetland restoration projects	Comparative case study	Project documentation	Planning and implementation	Moderate
Grygoruk and Rannow (2017)	Poland	Biebrza National Park – climate-adapted wetland management	Qualitative case study	Interviews, workshops, documents	Planning and adaptive management	High
Gumiero et al. (2013)	Multiple EU countries	River and floodplain restoration projects	Comparative synthesis of restoration projects	Published project documentation	Planning and implementation	Moderate
Hahn et al. (2006)	Sweden	Kristianstads Vattenrike Biosphere Reserve – wetland restoration and adaptive management	Qualitative case study	Interviews, observation, documents	Planning, implementation and adaptive management	High
Hammer et al. (2011)	Sweden	Northern Baltic Sea River Basin District – wetland restoration under the Water Framework Directive	Case study	Documents, interviews	Planning and implementation	Moderate
Hansson and Kokko (2018)	Sweden	Lake Hornborgasjön – post-restoration wetland management	Qualitative interview study	Semi-structured interviews	Post-restoration evaluation	High
Hansson et al. (2012)	Sweden	Agricultural landscapes under agri-environment	Mixed-methods study	Surveys, interviews	Planning and implementation	High

Study	Country	Restoration context	Study design	Data collection methods	Restoration stage examined	Reporting transparency*
		schemes – voluntary wetland creation				
Kininmonth et al. (2015)	Sweden	Stockholm County – landscape-scale wetland governance	Social network analysis	Governance network data	Governance and coordination	High
Lindahl and Söderqvist (2004)	Sweden	Kävlinge River Programme – agricultural wetland restoration	Qualitative case study	Interviews, documents	Planning and implementation	High
Manolache et al. (2018)	Romania	Natura 2000 wetland protected areas	Social network analysis	Interviews, network analysis	Governance	High
Nita et al. (2018)	Romania	Iron Gates Natural Park (Natura 2000) – wetland management	Qualitative case study	Surveys, interviews	Governance and management	High
Ricart and Rico-Amorós (2022)	Spain	El Hondo Natural Park – coastal wetland management	Qualitative case study	Interviews, documents	Governance and management	High
Root-Bernstein and Frascaroli (2016)	Italy	Po Delta – wetland restoration and management	Comparative qualitative case study	Interviews, observation, documents	Planning, implementation and management	High
Schultz et al. (2007)	Sweden	Kristianstads Vattenrike Biosphere Reserve – ecosystem restoration and adaptive management	Qualitative case study	Interviews, observation, documents	Adaptive management	High

Study	Country	Restoration context	Study design	Data collection methods	Restoration stage examined	Reporting transparency*
Söderqvist (2003)	Sweden	Kävlinge River Programme – agricultural wetland restoration	Programme evaluation	Documents, interviews	Planning and implementation	Moderate

D2. Grey literature (n = 3)

Study	Country	Restoration context	Report type	Information sources	Restoration stage examined	Reporting transparency*
Alström et al. (2000)	Sweden	Southern Sweden watershed programme – agricultural wetland restoration	Project evaluation report	Programme documentation, stakeholder interviews and project records	Planning and implementation	High
Andersson (2012)	Sweden	National Rural Development Programme – agricultural wetland restoration	National synthesis report	Programme evaluations, administrative documents and stakeholder interviews	Planning, implementation and governance	High
Elofsson et al. (2021)	Sweden	National ecological compensation programme – wetland restoration	Policy evaluation report	Policy documents, programme data and economic analysis	Implementation	Moderate

***Reporting transparency appraisal**

Reporting transparency was assessed to support interpretation of the evidence rather than to exclude studies from the review. Each study was evaluated against the following five criteria:

1. **Clarity of the restoration context** (whether the restoration setting and objectives were adequately described);
2. **Identification of stakeholder groups** (whether the principal stakeholders and their roles were clearly reported);
3. **Description of data collection methods** (whether the empirical basis of the study was sufficiently described);
4. **Transparency of the analytical approach** (whether the analytical procedures used to derive the findings were adequately explained); and
5. **Consistency between evidence and conclusions** (whether the conclusions were supported by the reported empirical evidence).

Studies were classified as:

- **High** – all or most reporting criteria were clearly satisfied;
- **Moderate** – most criteria were reported, but one or more aspects of the methodology or analysis lacked sufficient detail;
- **Limited** – reporting was insufficient to permit confident interpretation.

No studies were excluded on the basis of reporting transparency. The appraisal was used to inform the interpretation and synthesis of the evidence.