



Agenda Item 5.1
For Information

Council

CNL(15)21

***Annual Progress Report
on Actions Taken Under Implementation Plans for the Calendar Year 2014***

EU – Germany

CNL(15)21

Annual Progress Report on Actions taken under Implementation Plans for the Calendar Year 2014

The primary purposes of the Annual Progress Reports are to provide details of:

- any changes to the management regime for salmon and consequent changes to the Implementation Plan;
- actions that have been taken under the Implementation Plan in the previous year;
- significant changes to the status of stocks, and a report on catches; and
- actions taken in accordance with the provisions of the Convention

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **by 1 April 2015**.

Party:	European Union
Jurisdiction/Region:	Germany

1: Changes to the Implementation Plan
1.1 Describe any proposed revisions to the Implementation Plan <i>(Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 December).</i>
./.
1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.
<p style="text-align: center;"><u>Rhine</u></p> <p><u><i>North Rhine-Westphalia</i></u> Two hydropower plants of the Sieg and Wupper rivers were equipped with fish protection devices for downstream migrating smolts and eels. Function controls of these pilot projects will be carried out in 2015.</p> <p><u><i>Rhineland-Palatinate / Hesse</i></u> The states (Länder) Rhineland-Palatinate and Hesse contracted the Agri-Food & Biosciences Institute Northern Ireland (AFBINI) to conduct a genetic analysis of tissue samples taken from offspring of the brood-stock of the “Lachszenrum Hasper Talsperre” hatchery. The aim of the study is to answer two basic management questions: how do the samples compare in genetic terms with its donor stock from the River Ätran in Sweden (e.g. has genetic variation been lost in the Lachszenrum Hasper Talsperre hatchery population relative to the River Ätran population), and to what donor stock are the hatchery samples most closely related. Results of this research project are available since February 2014.</p>

Baden-Wuerttemberg

Research by the Swiss Federal Office for the Environment (FOEN) as to the origin of returning salmon is continuing (see APR 2013). The region Baden-Württemberg supports the efforts of the Swiss colleagues and provided sample material from the Baden-Württemberg salmon programme in 2014.

Elbe

Brandenburg

Tests for a video registration of adult salmon and sea trout are currently ongoing.

A calcein-marking programme of salmon fry is planned. Uncertainty exists with regard to food law issues in this context.

2: Stock status and catches.

2.1 Provide a description of any new factors which may significantly affect the abundance of salmon stocks and, if there has been any significant change in stock status since the development of the Implementation Plan, provide a brief (200 word max) summary of these changes.

Rhine

ICPR

The downward trend observed in recent years did not continue. For the first time within the last four years a significant rise of registered numbers of returning adult salmon could be noted in 2014. The number of registered adult salmon returning from the sea and observations of natural reproduction of salmon in the Rhine tributaries are documented (see graph and statistics attached).

North Rhine-Westphalia

The number of registered adult salmon increased in the North Rhine-Westphalian salmon project rivers compared with previous years.

The cormorant predation on downstream migrating smolts is increasing.

Baden-Wuerttemberg

The number of recorded salmon in the upstream counting stations of the fish pass at the barrages Iffezheim and Gamsheim increased significantly in 2014. Whether this represents a turnaround due to the extensive conservation efforts is not known yet.

Unfortunately the high predation pressure by cormorants on downstream migrating smolts is increasing due to growing cormorant breeding grounds.

Elbe

Lower Saxony

There are no significant changes in the status of Lower Saxon salmon stocks (applies to the Elbe, Weser and Ems catchments). Natural reproduction of salmon could not be recorded for Lower Saxony in 2014.

Salmon catches in recreational fisheries were carried out in few tributaries of the tidal Elbe exclusively.				
<u>Brandenburg / Saxony-Anhalt / Saxony</u>				
Salmon run and reproduction was negatively impacted by unusual high temperatures and low water levels in the tributaries of the middle and upper Elbe River. Therefore 2014 was a poor salmon season measured by the registered adult salmon and natural reproduction in the Elbe river catchment.				
2.2 Provide the following information on catches:(nominal catch equals reported quantity of salmon caught and retained in tonnes ‘round fresh weight’ (i.e. weight of whole, ungutted, unfrozen fish) or ‘round fresh weight equivalent’).				
(a) provisional nominal catch (which may be subject to revision) for 2014 (tonnes)	In-river 0,3t catch by recreational fisheries for Lower Saxony	Estuarine ./.	Coastal ./.	Total 0,3t
(b) confirmed nominal catch of salmon for 2013 (tonnes)	0,3t catch by recreational fisheries for Lower Saxony	./.	./.	0,3t
(c) estimated unreported catch for 2014 (tonnes)	./.	./.	./.	./.
(d) number and percentage of salmon caught and released in recreational fisheries in 2014.	Fisheries on salmon is prohibited in the entire Rhine catchment. In the other river catchments no catch and release is practiced.			

3: Implementation Plan Actions.		
3.1 Provide an update on progress against actions relating to the Management of Salmon Fisheries (Section 2.8 of the Implementation Plan).		
<i>Note: The reports under ‘Progress on Action to Date’ should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.</i>		
Action F1:	Description of Action (as submitted in the IP):	The ICPR has drafted recommendations aimed at improving legal compliance and thus reducing by-catches and illegal catches of salmon by professional and recreational fishing (see " Master Plan Migratory Fish Rhine ").
	Expected Outcome (as submitted in the IP):	Diminish the pressure due to fishery.
	Progress on Action to Date (see note above):	Installation of several zones where fishing is prohibited (e. g. mouth of River Sieg, around the Haringvlietsluices in NL). Information campaigns amongst fishermen in several federal states (e. g. leaflets). The ICPR-expert group FISH has asked the Dutch delegation to examine the fishing activities at the coast to

		ensure that more salmon reach the spawning grounds in the German and French tributaries to the River Rhine.
	Current Status of Action (e.g. 'Not started'; 'Ongoing'; 'Completed'):	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F2:	Description of Action (as submitted in the IP):	Developing of a self-sustaining salmon population in the Agger river without stocking.
	Expected Outcome (as submitted in the IP):	Verification if the salmon population in this river is restored successfully.
	Progress on Action to Date (see note above):	In a subsystem of the Agger river stocking has been gradually reduced since 2013. This process will be supported scientifically and is initially planned for the next two years. Thereafter, the results will be checked and if necessary be applied to other rivers.
	Current Status of Action (e.g. 'Not started'; 'Ongoing'; 'Completed'):	Ongoing
	If 'Completed', has the Action achieved its objective?	

3.2 Provide an update on progress against actions relating to Habitat Protection and Restoration (Section 3.4 of the Implementation Plan).

Note: The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

Action H1:	Description of Action (as submitted in the IP):	The German Federal Ministry of Transport, Building and Urban Development launched the program "Durchgängigkeit Bundeswasserstraßen" (Patency Federal Waterways) in 2012. Its objective is to preserve and restore the ecological passability at about 250 barrages in German federal waterways to improve fish migration. Many of the proposed measures in the catchments of Rhine, Ems, Weser and Elbe are located in the migration routes to current or potential salmon reintroduction rivers. Hence these activities have a high priority for reintroduction of salmon in Germany.
	Expected Outcome (as submitted in the IP):	Increased accessibility of spawning and juvenile habitats.
	Progress on Action to Date (see note above):	The implementation takes longer than expected. In contrast to the first implementation strategy with 46 measures, the start of constructions for 10 measures is planned until the end of 2015. Further 18 measures are intended to start with construction until 2018, and 53 measures until 2027. Generally, for more than 30 measures the process of planning has been started at the beginning of 2015. One measure is under construction and three fishways are now ready and will be monitored. As a consequence a total of

		12 measures have been realized at federal waterways since 2010.
	Current Status of Action (e.g. 'Not started'; 'Ongoing'; 'Completed'):	Ongoing
	If Completed, has the Action achieved its objective?	
Action H2:	Description of Action (as submitted in the IP):	Restoration of up- and downstream river continuity and development of the quantitative and qualitative aspects of spawning and juvenile habitats in the entire Rhine catchment. The specific measures planned for anadromous migratory fish in the different sections of the Rhine are listed in the " Master Plan Migratory Fish Rhine ".
	Expected Outcome (as submitted in the IP):	Increased quality and quantity of spawning and juvenile habitats and decreased mortality due to barrages and hydropower plants.
	Progress on Action to Date (see note above):	The draft of the second River Basin Management Plan "Rhine" (only available in German, French and Dutch; an English translation of the final version will be available in January 2016) according to the European Water Framework Directive contains a description of measures for migrating fish (chapter 7.1.1) and a list of obstacles that will be modified until 2021 (annex 8).
	Current Status of Action (e.g. 'Not started'; 'Ongoing'; 'Completed'):	Ongoing
	If Completed, has the Action achieved its objective?	
Action H3:	Description of Action (as submitted in the IP):	Reestablishing continuity of the Elbe river and its primary tributaries from estuary to the springs. The action includes 34 weirs in Brandenburg, 6 in Hamburg, 3 in Mecklenburg-Western Pomerania, potentially 1 in Lower Saxony, 9 in Saxony-Anhalt, 1 in Schleswig-Holstein, 23 in Thuringia, 54 in Saxony and 3 under responsibility of the Federal Government.
	Expected Outcome (as submitted in the IP):	Improved access to spawning grounds and decreased mortality due to barrages and hydropower plants.
	Progress on Action to Date (see note above):	According to the Flussgebietsgemeinschaft Elbe (FGG Elbe) the goals of the first cycle of the management plan (2009-2015) included the improvement of the longitudinal continuity at 135 barrages by 2015. Due to technical reasons some of the mentioned 135 transverse structures were combined to 129 locations. 13 of these sites were already sufficiently surmountable by 2009. That leaves 116 locations where the implementation of the planned measures were evaluated 2014. Expectedly by the end of 2015 35 sites will be completed (30%), 46 locations are in planning (40%) and the work on 26 sites has not yet begun

		(22%). At the remaining 9 locations (8%) the function controls of the implemented measures still need to be carried out.
	Current Status of Action (e.g. 'Not started'; 'Ongoing'; 'Completed'):	Ongoing
	If Completed, has the Action achieved its objective?	

3.3 Provide an update on progress against actions relating to Aquaculture, Introductions and Transfers and Transgenics (Section 4.8 of the Implementation Plan).

Note: The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

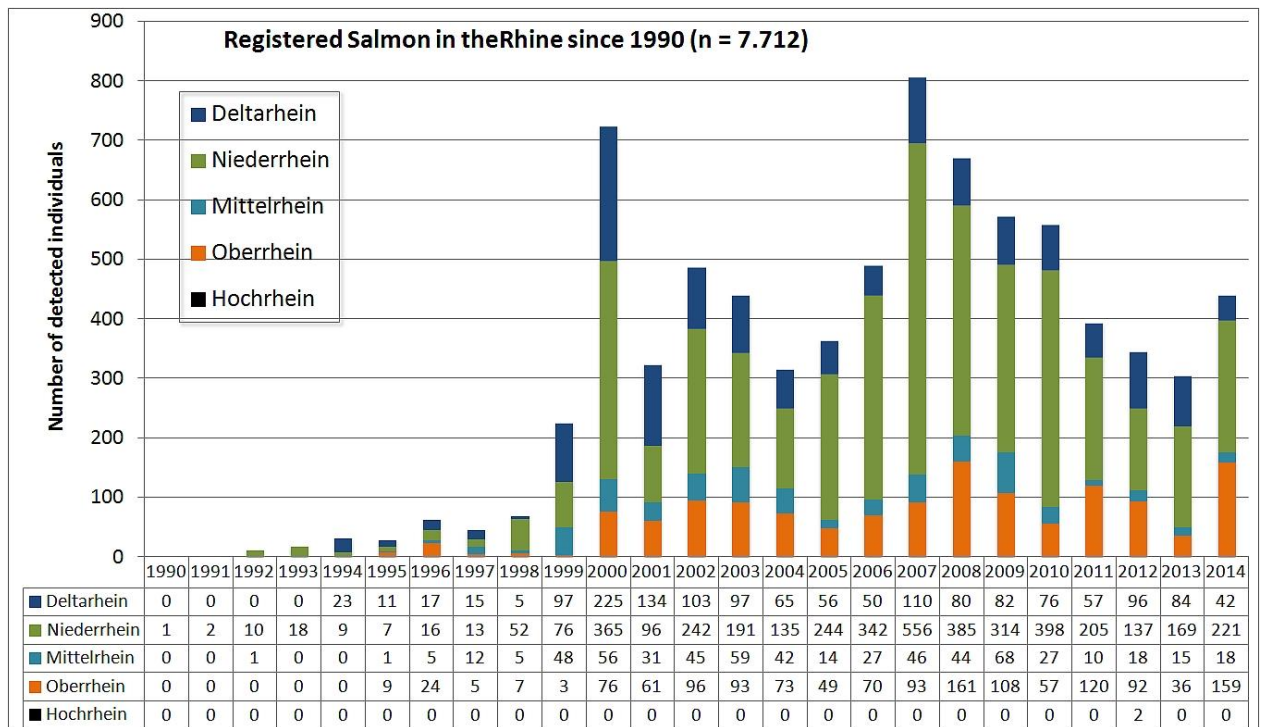
Action A1:	Description of Action (as submitted in the IP):	Stocking material is completely attained from material gained from returning spawners, from reconditioned kelts and captive breeding in North Rhine Westphalia Rhine tributaries.
	Expected Outcome (as submitted in the IP):	No further use of ova from foreign origin. Establish a separate locally adapted indigenous salmon population in North Rhine Westphalia Rhine tributaries.
	Progress on Action to Date (see note above):	The test operation of the Wildlachszenrum Rhine-Sieg (hatchery) was successful in 2014. The implementation of action A1 depends strongly on the continued successful operation of the "Wildlachszenrum".
	Current Status of Action (e.g. 'Not started'; 'Ongoing'; 'Completed'):	Ongoing
	If Completed, has the Action achieved its objective?	
Action A2:	Description of Action (as submitted in the IP):	Experts annually exchange information within the ICPR expert group FISH about the possibilities of genetic monitoring of salmon in the Rhine catchment. The different initiatives in the Rhine catchment now aim at harmonizing their genetic monitoring.
	Expected Outcome (as submitted in the IP):	Genetic monitoring will allow assessing 1. the efficiency of o stocking measures performed; o different strains that are stocked; o different stocking strategies (age, parents used, the origin of broodstock etc.) 2. the relative importance for stocking of the different streams of the Rhine catchment.
	Progress on Action to Date (see note above):	Results of different monitoring campaigns were presented in the annual exchange in January 2015 and will be documented for the whole Rhine in the course of the year 2015.
	Current Status of Action	Monitoring: Ongoing; Harmonization of methods: completed

	(e.g. 'Not started'; 'Ongoing'; 'Completed'):	
	If Completed, has the Action achieved its objective?	The objective of harmonizing the genetic monitoring on the Rhine has been achieved: All campaigns used the SALSEA method, so results are fairly comparable.

4: Additional information required under the Convention	
4.1	Details of any laws, regulations and programmes that have been adopted or repealed since the last notification.
	./.
4.2	Details of any new commitments concerning the adoption or maintenance in force for specified periods of time of conservation, restoration and other management measures.
	./.
4.3	Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
	./.
4.4	Details of any new actions to invite the attention of States not Party to the Convention to matters relating to the activities of its vessels which could adversely affect salmon stocks subject to the Convention.
	./.
4.5	Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.
	./.

Appendixes (Rhine)

Appendix 1: Registered salmon in the Rhine since 1990



Appendix 2: Stocking measures with migratory salmonids in the Rhine system 2014

Stocking measures with big salmonids in the Rhine system 2014					
Country / Water body	Stocking				Sums / smolt equivalent
Switzerland	Kind and stage	Number	Origin	Marking	35.500
Rhine	L b (La)	8.000	Petite Camargue/Rhine F2	Genetics	
Birs	L b (La)	3.000	Petite Camargue/Rhine F2	Genetics	
Ergolz	L b (La)	2.000	Petite Camargue/Rhine F2	Genetics	
Riehen Tych	L b (La)	1.000	Petite Camargue/Rhine F2	Genetics	
Wiese	L b (La)	3.000	Petite Camargue/Rhine F2	Genetics	
Arisdörferbach	L b (La)	2.500	Petite Camargue/Rhine F2	Genetics	
Möhlbach	L b (La)	6.500	Petite Camargue/Rhine F2	Genetics	
Etzgerbach	L b (La)	4.000	Petite Camargue/Rhine F2	Genetics	
Bachtalbach	L b (La)	1.000	Petite Camargue/Rhine F2	Genetics	
Inlanc canal Klingnau	L b (La)	1.000	Petite Camargue/Rhine F2	Genetics	
Magdenerbach	L b (La)	3.500	Petite Camargue/Rhine F2	Genetics	
France					442.210
Rhine (Old Bed of the Rhine)	L0	77.000	Rhine		3850
	L0	175.200	Allier		8760
Doller	La	24.850	Rhine		2485
Thur	La	26.350	Rhine		2635
Lauch	La	10.760	Rhine		1076
Fecht and tributaries	La	37.500	Rhine	650 a/c	3750
Ill	La	2.840	Rhine		284
Glessen and tributaries	La	32.900	Rhine	400 a/c	3290
Bruche	La	42.470	Rhine	2120 a/c	4247
	La				
Moselle	La	5.340	Ätran		534
Houille	La	4.000	Rhine		400
Blies	La	3.000	Rhine		300
Saar (Moselle system)					
Luxembourg		0			0
Sure (Moselle)		0			
Germany, Baden-Württemberg					381.750
Alb	L a	62.270	Allier		
Murg	L a	84.600	Allier		
Oos, Oosbach	L a	2.700	Allier		
Rench	L a	10.000	Allier		
	L a	103.150	EFH Rhine		
Kinzig and tributaries Erlenbach, Gutach, Wolf	L a	49.000	urner Rhine x EFH Returner Rhine		
	L p	8.000	urner Rhine x EFH Returner Rhine		
	L p	1.530	Allier		
	L p s	700	EFH Rhine		
Elz	L 0	8.000	Allier		
Elz	L p s	26.900	urner Rhine x EFH Returner Rhine		
Dreisam	L p s	5.000	Allier		
Wiese	L a	8.900	Allier		
Wiese	L p s	11.000	Allier		
Germany, Hesse					
Nidda *	Mf p	3.800	Wupper	a/c	3.800
Lahn, Dill, Weil	L s 2	410	EFH Ätran		42.410,00
Kinzig (Main)	L p	1.000	EFH Ätran		
Schwarzbach (Main)	L p	19.000	EFH Ätran		
Weschnitz		0			
Wisper	L p	20.000	EFH Ätran		
	L s 1	2.000	EFH Ätran	a/c	
Germany, Rhineland Palatinate					218.070
Ahr	L p	47.000	EFH Ätran		
Ahr					
Lahn, Mühlbach	L p	1.200	EFH Ätran		
Moselle, Elzbach	L s 2	2.340	EFH Ätran		
Moselle, Elzbach	L p	15.000	EFH Ätran		
Moselle, Elzbach	L s 1	1.730	EFH Ätran	a/c	
Saynbach	L s 1	3.460	EFH Ätran	a/c	
Nister, Kleine Nister (Sieg)	L p	5.000	EFH Ätran		
Nister (Sieg)	L 1	8.570	EFH Ätran		
	L p	15.000	KFS		
Nister (Sieg)	L p	40.000	EFH Ätran		
	L s 1	3.000	EFH Ätran	a/c	
Wisserbach (Sieg)		0			
		0			
Nahe (first stocking!)	L p	2.000	EFH Ätran		
Nahe (first stocking!)	L s 1	5.770	EFH Ätran	a/c	
Guldenbach (Nahe) (first stocking!)	L p	13.000	EFH Ätran		
Speyerbach (first stocking!)	L b	15.000	EFH Allier		
Wieslauter	L b	40.000	EFH Allier		
Germany, North Rhine Westphalia					862.627
	La	66.071	Returner to R. Sieg / EFH		9911
	La	483.053	Returner to R. Sieg / EFH; returner to R. Gundenau /		82119
	Lp	100.366	Returner to R. Sieg / EFH; returner to R. Gundenau /	a/c	9090
Sieg and tributaries	L1	33.191	Returner to R. Sieg / EFH		6638
	L2 (Smolt)	890	Returner to R. Sieg / EFH	Heliogen blue / NEDAP	223
	L2 (Smolt)	1.056	Returner to R. Sieg / EFH	HDX / NEDAP	264
Wupper and small tributaries	L0	86.000	EFH		4300
	La	52.000	EFH		7800
Dhünn and small tributaries	La	40.000	Returner to R. Sieg / EFH		6000
cwt = coded wire tags; a/c = adipose clipping; EFH = parent fish keeping; KFS = Monitoring and catching station; L e = salmon spawn; L b = Salmon fry; L0 0 unfed fry; La = feeded fry; L p = Salmon parr (= one summer old, half year = 0+); L ps = Salmon pre-smolt; L s = Salmon smolt; L 1 = one year old salmon; L 2 = two years old salmon; Mf p = Sea trout parr; k. A. = not specified by deadline					
Sum stocking stages		1.986.367			

Country	System	Project water - Selection of the most important tributaries (* no stocking)	First salmon stocking	Year of spawning proof (reproduction during the preceding autumn/winter)														
				1994	1995	1996	1997	1998	2006	2007	2008	2009	2010	2011	2012	2013	2014	
D	Wupper-Dhünn	Wupper Dhünn Eifgenbach	1993	/	/	/	/	/	/	/	/	(X)	/	/	/	/	/	
				/	/	/	/	/	/	X	/	/	/	/	/	/	/	
				/	/	/	/	/	/	0	/	/	/	/	/	/	/	
D	Sieg	Sieg NRW Agger (lower 30 km) Naafbach Pleisbach Hanfbach Bröl Homburger Bröl Waldbrol Derenbach Steinchesbach Krabach Gierzhagener Bach Irsenbach Sülz Schlingensbach	Salmon stocking measures in the Sieg river system since 1988, since 1998 in addition to classical upper and lower regions also in selected smaller and medium sized brooks	X	/	/	/	/	/	/	/	/	/	/	XX	/	XX	
				X	/	/	/	/	/	XX	XXXX	XXXX	XXXX	/	/	XXX	XXX	XXX
				/	/	/	/	/	/	XXX	XXXX	XXXX	XXXX	/	/	XXX	XXX	XXX
				/	/	/	/	/	/	X	/	X	/	/	/	/	/	/
				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
				X	/	/	X	/	XX	XXX	/	XXX	/	/	/	XX	XXX	XXX
				/	/	/	/	/	XX	X	/	/	/	/	/	/	0	/
				/	/	/	/	/	XXX	XXX	/	0	/	/	/	/	XXX	XXX
				/	/	/	/	/	0	/	/	/	/	/	/	/	/	/
				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
				/	/	/	/	/	/	X	/	/	/	/	/	/	/	/
				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
				/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
			/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	XX	/	/	/	/	XXX	/	XXX	/	
			/	/	/	/	/	/	X	XXXX	XXX	/	XXX	0	0	0	0	
			/	/	/	/	/	/	X	XXXX	X	0	?	?	?	?	?	
			/	/	/	/	/	/	XXX	XX	XXXX	X	X	X	X	X	X	
			/	/	/	/	/	/	XXX	XX	XXXX	0	X	0	0	0	0	
			/	/	/	/	/	/	XX	XX	0	0	0	0	/	/	/	
			/	/	/	/	/	/	/	X	X	x	0	0	0	0	0	
			/	/	/	/	/	/	/	/	/	/	0	/	/	/	0	
D	Ahr	Ahr	1995	/	/	/	/	/	0	0	?	0	XX	XX	0	XX	XX	
D	Nette	Nette *	-	/	/	/	/	/	X	0	X	0	X	0	X	0	XX	
D	Saynbach	Saynbach	1994	/	/	/	/	/	XX	XXXX	XXXX	XX	XX	XXX	X	X	XX	
		Brexbach	1994	/	/	/	/	/	0	0	XXX	XX	XX	0	0	0	0	
D	Moselle	Elzbach Kyll Prüm system	2005 1996 1996	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Lux/D		Sauer	1992	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
		Our	1992	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
D	Lahn	Mühlbach Weil Dill	1994 1995 1995	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
			1995	/	/	/	/	/	/	/	/	/	/	/	/	/	0	
			1995	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
D	Nahe	Nahe	2004 / 2013	/	/	/	/	/	/	/	/	/	/	/	/	/	0	
D	Wisper	Wisper	1999	/	/	/	/	/	0	XX	XXXX	0	X	XX	0	0	XX	
D	Main	Schwarzbach Kinzig system (Hesse)	2009 2001	/	/	/	/	/	/	/	0	0	0	0	0	0	0	
			2001	/	/	/	/	/	0	/	/	/	/	/	?	0	0	
D	Alb	Alb	2001	/	/	/	/	/	/	/	/	/	X	X	X	X	X	
D/F	(Wies)Lauter	(Wies)Lauter	1991	/	/	/	/	/	/	/	X	X	X	X	X	X	X	
D	Murg	Murg	2001	/	/	/	/	/	X	X	/	/	/	X	X	X	/	
F / D	Rhine	Rhine downstream Iffezh	-	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
D	Rench	Rench	2001	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
F	Ill	Bruche Fecht Upper Ill system** Moder	1991 1991 1991 2005	/	/	X	X	X	X	X	X	XXX	XXX	XXX	XXX	XX	XXX	
			1991	/	/	/	/	/	/	/	/	XX	X	XX	0	XX	0	
			1991	/	/	/	/	/	/	/	/	/	X	X	X	0	0	
			2005	/	/	/	/	/	X	X	X	X	X	X	X	0	X	
D	Kinzig	Kinzig	2001	/	/	/	/	/	/	/	/	/	X	X	X	/	/	
D	Elz + Dreisam	Elz Dreisam	2005 2008	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
F / D	Rhine	Old branch of the Rhine	1991	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
CH	Wiese	Wiese	1984	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
CH	Birs	Birs	1995	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
CH	Ergolz	Ergolz	1995	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
				1994	1995	1996	1997	1998	2006	2007	2008	2009	2010	2011	2012	2013	2014	
LEGEND																		
quality proof / individuals detected / samples taken from individual locations				X														
qualitative evidence / returnees released upstream of obstacle				(X)														
little success of reproduction (1 to ≤ 5 parr/100 m2)				XX														
considerable success of reproduction (> 5 - 50 parr/100 m2)				XXX														
extremely high rate of success of reproduction (> 50 parr/100 m2)				XXXX														
Investigations carried through, no cases detected				0														
no investigation				/														
Evidence uncertain				?														