

CEDREN

Final Report

Appendix



CEDREN

Centre for Environmental Design of Renewable Energy



Appendix

1 Centre funding and cost

Funding [kNOK]

Partner / Project	Management	Common activities	Pilot	Bird-Wind	Envi-DORR	Envi-PEAK	Hydro-PEAK	GOVREP	OPTI-POL	Tools
RCN 193818 CEDREN FME	10 111	13 873	3 784	3 898	7 416	13 459	13 824	5 654	6 439	1 578
RCN 201779 CEDREN RENERGI	7 289	10 001	2 728	2 810	5 346	9 702	9 965	4 076	4 642	1 137
RCN BirdWind/EnviDORR				2 600	2 600					
RCN 207774 SusGrid										
RCN 215934 EcoManage										
RCN 221674 FutureHydro										
RCN 228714 HydroBalance										
RCN 244022 SafePass										
RCN 244050 SusWater										
Infrastructure										
SINTEF	3 624	6 055	1 411		806	3 866	1 722	2 993	601	594
NINA	794	1 671	573	1 273	1 265	1 391	7		3 203	7
NTNU	587	5 350	160		402	3 233	11 078	900		281
LFI	21	61			71	252				
NIVA	6	9				165		113		
Uni Research	24	91	336		868	773		397		75
Agder Energi AS	1 103	876	277	246	643	1 011	902	530	407	100
BKK AS	679	281	64	66	271	382	235	96	110	27
E-CO Energi	807	1 077	282	290	926	1 002	1 029	421	479	117
Eidsiva Vannkraft	342	416	113	117	222	404	415	170	193	47
Energi Norge	1 574	1 031	321	337	634	1 082	1 115	432	494	117
Hydro Energi AS	404	555	151	156	296	538	553	226	257	63
ICH										
Sira-Kvina kraftselskap	670	758	207	213	423	792	772	312	352	86
Statkraft AS	6 058	7 396	2 747	1 054	2 988	8 745	6 571	3 281	4 772	1 247
Statnett	578	695	180	185	352	639	656	268	396	75
TrønderEnergi	112	139	38	45	159	140	144	57	64	16
Miljødirektoratet	1 278	887	181	282	583	629	524	324	339	83
NVE	505	538	147	151	288	522	536	219	250	61
Hafslund Nett AS										
NTE										
Troms Kraft Nett AS										
lyse Produksjon AS	150	156	43	44	83	151	155	64	72	18
SFE Produksjon AS										
GLB	7									
Akershus Energi										
Other funding		470		389	298				315	
Total funding	36 720	50 384	13 741	14 155	26 932	48 880	50 205	20 533	23 385	5 730

Partner / Project	Sus-Grid	Eco-Manage	Future-Hydro	Hydro-Balance	Safe-Pass	Sus-Water	Infra-structure	Total
RCN 193818 CEDREN FME								80 033
RCN 201779 CEDREN RENERGI								57 695
RCN BirdWind/EnviDORR								5 200
RCN 207774 SusGrid	9 862							9 862
RCN 215934 EcoManage		10 400						10 400
RCN 221674 FutureHydro			2 800					2 800
RCN 228714 HydroBalance				17 692				17 692
RCN 244022 SafePass					14 000			14 000
RCN 244050 SusWater						13 000		13 000
Infrastructure							21 172	21 172
SINTEF	478	292	2 819	51				25 310
NINA	339							10 515
NTNU		580						22 571
IFI				102				507
NIVA								293
Uni Research	134							2 699
Agder Energi AS	663	695		868	1 763	200		10 282
BKK AS	400	2		378	669	755		4 415
E-CO Energi					383			6 815
Eidsiva Vannkraft					2 928			5 367
Energi Norge	600	90		420	1 555	221		10 023
Hydro Energi AS					700	400		4 300
ICH								0
Sira-Kvina kraftselskap				800	600	600		6 585
Statkraft AS	1 217	2 048		1 221	1 000	100		48 446
Statnett	1 704			1 375				7 103
TrønderEnergi		6			358	200		1 477
Miljødirektoratet	71	578		52	757	1 963		8 531
NVE	338			240	249	11		4 055
Hafslund Nett AS	824							824
NTE	483				400			883
Troms Kraft Nett AS	380							380
Lyse Produksjon AS					451	640		2 027
SFE Produksjon AS					168	449		618
GLB					1 791			1 798
Akershus Energi					300			300
Other funding	150			2 710				4 333
Total funding	17 643	14 690	5 619	25 908	28 072	18 539	21 172	422 309

Cost [kNOK]

Partner / Project	Management	Common activities	Pilot	Bird-Wind	Envi-DORR	Envi-PEAK	Hydro-PEAK	GOVREP	OPTI-POL	Tools	Sus-Grid	Eco-Manage	Future-Hydro	Hydro-Balance	Safe-Pass	Sus-Water	Infra-structure	Total
SINTEF	25 066	24 940	9 054		5 892	21 472	9 437	14 290	2 905	3 335	11 359	7 656	5 206	13 044	3 093	4 494	3 171	164 414
NINA	4 745	15 379	3 317	13 917	12 182	10 233	43		20 262	1 038	3 907	1 813	312	5 833	17 067	6 525	8 736	125 312
NTNU	1 911	9 049	384		2 250	11 215	40 314	3 300		934	148	4 594	101	3 824	4 458	2 930	9 265	94 676
Lab for ferskvannøkologi	71	127			858	1 268						300		443				3 066
NIVA	76	66				708		537						44		3 400		4 831
Uni Research	95	239	666		4 458	3 129		1 869		395	1 767				1 882	652		15 151
Others	11													2 306				2 317
Agder Energi AS	464		38		175	161	29	173			163	53		68	63			1 387
BKK AS	507	44			145	153						2		78	169	155		1 252
E-CO Energi	54	44			374										83			555
Eidsiva Vannkraft	39														368			407
Energi Norge	822		40	48	83	82	87	12	15			40		20	155	21		1 425
Hydro Energi AS																		0
ICH																		0
Sira-Krina kraftselskap	117				18	57	17	4										213
Statkraft AS	1 556	61	195	40	90	240	233	223			17	48		21				2 724
Statnett	98	36							90		104			175				503
TrønderEnergi	11			6	85	6	6					6						119
Miljødirektoratet	922	399	47	145	322	156	38	125	113	28	71	178		52	157	263		3 016
NVE	113														49	11		173
Hafslund Nett AS											24							24
NTE											83							83
Troms Kraft Nett AS																		0
Lyse Produksjon AS	36														51	40		127
SFE Produksjon AS															18	49		68
GLB	7														459			466
Akershus Energi																		0
Total cost	36 720	50 384	13 741	14 155	26 932	48 880	50 205	20 533	23 385	5 730	17 643	14 690	5 619	25 908	28 072	18 539	21 172	422 309

2 Invited key-note speakers and committee members

2010 (2)

Ånund Killingtveit; Programme committee for RERC 2010; Trondheim; 7-8 June 2010

Tor Haakon Bakken; Programme committee for RERC 2010; Trondheim; 7-8 June 2010

2011 (8)

Kjetil Bevanger; Congress President for CWW 2011; Trondheim; 2-5 May 2011

Roel May; Convenor on CWW 2011; Trondheim; 2-5 May 2011

Atle Harby; UNEP International Resource Panel workshop on GHG Mitigation Technologies: "Environmental sustainability benchmarking of low-carbon energy technologies"; Helsinki; 1-2 June 2011

Peter Rudberg; Key-note speaker, International Network of Basin Organizations EURO-INBO 2011; Porto, Portugal; 27-30 September 2011

Ånund Killingtveit; Panel debate, Hydro 2011; Praha; 19 October 2011

Knut Alfredsen; Arctic Monitoring and Assessment Programme (AMAP), Snow, Water, Ice and Permafrost in the Arctic (SWIPA) working group on river and lake ice

Knut Alfredsen; Key-note speaker, 18th Northern Research Basins symposium

Ånund Killingtveit; IPCC - Special Report on Renewable Energy (SRREN)

2012 (10)

Atle Harby; Programme committee for Arctic Frontiers 2012 - Energies of the High North; Tromsø; 22-27 January 2012

Ånund Killingtveit; Key-note speaker, Arctic Frontiers 2012 - Energies of the High North; Tromsø; 22-27 January 2012

Ånund Killingtveit; Programme committee for RERC 2012; Trondheim; 16-17 April 2012

Tor Haakon Bakken; Programme committee for RERC 2012; Trondheim; 16-17 April 2012

Tor Haakon Bakken; Key-note speaker, RERC 2012 "What is the accumulated environmental impact of hydropower production? A comparative study of the environmental impacts from small-scale hydropower development versus large"

Ånund Killingtveit; Key-note speaker, RERC 2012 "Energy and water management – The Pangani River case"

Atle Harby; Invited key-note speaker, Ecohydraulics 2012; Vienna; September 2012

Ånund Killingtveit; Invited speaker, International Forum for Energy and Revision of Public Policies for Sustainable Development, Efficiency and Energy Transition; Mexico City; 24-29 September 2012

Ånund Killingtveit; Invited speaker, Nordområdekonferansen 2012; Longyearbyen, Svalbard; 27-29 November 2012

Atle Harby; Member of the Management Board of European Energy Research Alliance Joint Program on Energy Storage, and coordinator of the Mechanical Storage sub-program (2012 ->)

2013 (4)

Atle Harby; 3rd ICEPE - International Conference on Energy Process Engineering; Frankfurt; 3-6 June 2013

Knut Alfredsen; Key-note speaker, 17th CRIPE River Ice Workshop; July 2013

Atle Harby; Invited speaker, 35th World Congress of the International Association for Hydro-Environment Engineering and Research (IAHR) "Ecohydraulic research and practice - mitigating climate change and environmental impacts"

Knut Alfredsen; International Member in The Committee on River Ice Processes and the Environment (CRIPE)

2014 (14)

Kjetil Bevanger; Invited speaker, International Conference on Overhead Lines; Fort Collins, Colorado, USA; 31 March - 3 April 2014

Julian Sauterleute; Invited speaker, Energy Storage 2014; Luxembourg; 14-15 May 2014

Ånund Killingtveit; Programme committee for RERC 2014

Atle Harby; Chair on Ecohydraulics 2014; 23, 24, 26 and 27 June 2014

Jochen Aberle; Chair on Ecohydraulics 2014; 23 June 2014

Hans-Petter Fjeldstad; Chair on Ecohydraulics 2014; 26 June 2014

Ånund Killingtveit; Chair on Ecohydraulics 2014; 27 June 2014

Ulrich Pulg; Chair on Ecohydraulics 2014; 27 June 2014

Knut Alfredsen; IAHR Ice research and Engineering Committee

Tor Haakon Bakken; Invited speaker and panelist, HydroVision 2014 session "Water consumption from hydropower"; Nashville, USA; 22-15 July

Tor Haakon Bakken; Invited speaker and panelist, Hydro2014 session "Valuing hydropower services"; Como, Italy; 13-15 October 2014

Ånund Killingtveit; Invited speaker and panelist, Hydro2014 session "Valuing hydropower services"; Como, Italy; 13-15 October 2014

Tor Haakon Bakken; Invited speaker and panelist, Sustainable Hydropower Reservoirs – Challenges and Opportunities; Addis Abeba, Ethiopia; 17-19 November 2014

Ånund Killingtveit; Invited speaker and panelist, Sustainable Hydropower Reservoirs – Challenges and Opportunities; Addis Abeba, Ethiopia; 17-19 November 2014

2015 (22)

Atle Harby; Member of Advisory Committee, and Chairman, International Conference on Hydropower for Sustainable Development; Dehradun, India; 5-7 February 2015

Atle Harby; Invited speaker, International Conference on Hydropower for Sustainable Development; Dehradun, India; 5-7 February 2015

Atle Harby; Invited speaker, Norway Day, Seminar on Norway House; Brussels; 8 June 2015

Ånund Killingtveit; Responsible for organizing visit and workshop for NTNU and two universities in Indonesia, ITB Bandung and ITS Surabaya; Trondheim; February 2015

Ånund Killingtveit; Member of evaluation committee for a PhD at Addis-Ababa Institute of Technology (AAIT); April 2015

Ånund Killingtveit; Guest Editor for "Special Volume Hydropower" in the Journal Energies, 2015

Ånund Killingtveit; Elected as Trustee member in AMI Hydropower Foundation, Aqua-Media International, The International Journal on Hydropower and Dams

Ånund Killingtveit; Elected as Board member in CDSI - CSDI – "Centre for Sustainable Development and Innovation of Water Technology"; Oslo

Ånund Killingtveit; Invitation to a World Bank "Workshop Managing Uncertainty in Hydropower Projects", Washington and HYDRO2015; Bordeaux

Ånund Killingtveit; Chairman on Session 17 "Succession Planning" under HYDRO2015; Bordeaux; October 2015

Ånund Killingtveit; Invited speaker, ACI's Hydropower Development: Europe 2015, Climate Change and Energy; Salzburg, Austria; September 2015

Ånund Killingtveit; Invited to participate in UNECE Expert Group on Resource Classification (Input on Renewable Energies, appointed by IHA)

Jochen Aberle; Member of International Advisory Board Scientific Committee for XXXIV International School of Hydraulics; Zelechow, Poland; May 2015

Jochen Aberle; Chairman of the session "Sedimentology-related modeling: deposit stratigraphy and bed cover" at the 8th Gravel Bed River Workshop; Kyoto, Takayama, Japan; September 2015

Jochen Aberle; Member of Scientific Committee for the 8th Gravel Bed River Workshop; Kyoto, Takayama, Japan; September 2015

Jochen Aberle; Associate Editor for Journal of Hydraulic Research (since 2008)

Jochen Aberle; Invitation to act as Guest Editor for a Special Issue on Watershed Sediment Processes in Water

Tor Haakon Bakken; Guest lecturer UC Davis; California, USA; 15 March 2015

Tor Haakon Bakken; Invited speaker ICOLD World Congress 2015; Stavanger, Norway; 15-17 June 2015

Magnus Korpås; Chair on EEM 2015; Lisboa; 19-22 May 2015

Magnus Korpås; Invited speaker, The Energy System in 2030, Kungliga Ingeniörsvetenskapsakademien (IVA) and Euro-CASE; Stockholm; 27-28 May 2015

Magnus Korpås; Programme committee for the 5th International Workshop in Hydro Scheduling; Trondheim; 17-18 September 2015

2016 (13)

Atle Harby; Invited speaker, Grid Innovation workshop; Helsinki; 26 January 2016

Atle Harby; Chair on 11th International Symposium on Ecohydraulics; Melbourne; 8-12 February 2016

Håkon Sundt; Chair on 11th International Symposium on Ecohydraulics; Melbourne; 8-12 February 2016

Atle Harby; Chair on Hydro and Environmental Sustainability; Grenoble; 16-17 March 2016

Atle Harby; Invited speaker, Hydro and Environmental Sustainability; Grenoble; 16-17 March 2016

Atle Harby; Invited speaker, Norsk miljøforskning underveis, Miljø2015; Oslo; 20-21 April 2016

Ånund Killingtveit; Lead Country Contributor for Norway; Renewables 2016 Global Status Report

Michael Belsnes; Disputas komite for Ignacio Guisández González; Universidad Politécnica de Madrid; 21 July 2016

Knut Alfredsen; Guest editor Sustainability (ISSN 2071-1050) of special issue on "Hydropower and Sustainability"

Tor Haakon Bakken; Guest editor Sustainability (ISSN 2071-1050) of special issue on "Hydropower and Sustainability"

Tor Haakon Bakken; Contributing author, Charting the Upsurge in Hydropower Development. World Energy Council, London, United Kingdom (ISBN 978 0 946121 41 0); 2015

Tor Haakon Bakken; Guest speaker, seminar Potsdam Institute for Climate Impact Research (PIK); Germany; 6 December 2016

Magnus Korpås; Invited speaker, ZERO-conference; Oslo; 23-24 November 2016

3 Key persons

Board	
Jan Alne	Statkraft (2009–2017)
Øyvind Stakkeland	Agder Energi (2009–2017)
Geir Taugbøl	Energi Norge (2009–2017)
Gaute Tjørhom	Sira-Kvina kraftselskap (2009–2012)
Petter Støa	SINTEF Energi AS (2009–2017)
Norunn Myklebust	NINA (2009–2011)
Asbjørn Rolstadås	NTNU (2009–2013)
Torodd Jensen	NVE (2012–2017, observer 2009–2012)
Reidar Dahl	Miljødirektoratet (2012–2015, observer 2009–2012)
Frank Nilsen	Research Council of Norway (observer 2009)
Erland Eggen	Research Council of Norway (observer 2010–2017)
Signe Nybø	NINA (2011–2017)
Jan Bråten	Statnett (2012–2014)
Geir Walsø	NTNU (2013–2017)
Sigve Næss	BKK (2014–2017)
Torfinn Sørensen	Miljødirektoratet (2015–2017)

Centre Management Team	
Atle Harby	SINTEF (2009–2017)
Kjetil Bevinger	NINA (2009–2012)
Ånund Killingveit	NTNU (2009–2017)
Hege Brende	NINA (2012–2014)
Ingeborg Helland	NINA (2014–2017)

Centre Management Group	
Arnt Ove Eggen	SINTEF (2009–2017)
Oddmund Rønning	NINA (2009–2012)
Knut Alfredsen	NTNU (2009–2017)
Torbjørn Forseth	NINA (2009–2017)
Tor Haakon Bakken	SINTEF (2009–2017)
Audun Ruud	SINTEF (2009–2015), NINA (2016–2017)
Helene Egeland	SINTEF (2012–2013)
Håkon Sundt	SINTEF (2013–2017)
Michael Belsnes	SINTEF (2013–2017)
Björg Bruset	NINA (2014–2014)
Anne Olga Syverhuset	NINA (2014–2016)
Julie Charmasson	SINTEF (2016–2017)
Astrid Bjerkås	NINA (2016–2017)

Scientific Committee (2010–2016)	
Daniel Boisclair	(University of Montreal Canada)
Klaus Jorde	(Entec Consultant Switzerland / KJ Consult Austria)
Silke Wieprecht	(University of Stuttgart Germany)
Nils Roar Sæthun	(University of Oslo Norway)

Reference Group (2010–2015)	
Merete Farstad	Fylkesmannens miljøvernnavdeling
Line Amlund Hagen	Intpow
Stein Erik Stinessen	Landssamanslutninga av vasskraftkommunar
Ola Skaalvik Elvevold	Natur og ungdom
Erik Helland-Hansen	Norconsult
Øyvind Fjeldseth	Norges Jeger- og Fiskerforbund (NJFF)
Torhildur Fjola Kristjansdottir	Norges naturvernforbund
Arild Skedsmo	World Wildlife Fund (WWF)
Torodd Jensen	NVE
Odd Kristian Selboe	Miljødirektoratet
Magne Fauli	Energi Norge
Ingrid Lomelde	World Wildlife Fund (WWF)
Mads Løkeland	Norges naturvernforbund
Ragnhild Elisabeth Waagaard	World Wildlife Fund (WWF)
Janne Stene	Bellona

Committee for innovation and implementation	
Linda Jenssen	Agder Energi (2011–2014)
Anne Marie Mæhre Seterlund	Statkraft (2011–2012)
Knut Erik Madsen	E-CO Vannkraft (2011–2012)
Audun Ruud	SINTEF (2011–2014)
Hege Brende	NINA (2012–2014)
Morten Stickler	Statkraft (2013–2014)
Svein Grotli Skogen	Miljødirektoratet (2013–2014)

Conferences and seminars arranged or co-arranged by CEDREN
Renewable Energy Research Conference 2010; Trondheim; 7-8 June 2010
Perspectives on hydropower's role to balance non-regulated renewable power production in Northern Europe; Düsseldorf, Germany; 15-16 December 2010
Conference on Wind energy and Wildlife impacts; Trondheim; 2-5 May 2011
North Sea Offshore Networks - Enabling Offshore Wind and Balancing Power; London, Great Britain; 6-8 June 2011
NoWPaS 2012; Trondheim; 21-23 March 2012
Renewable Energy Research Conference 2012, Trondheim; 16-18 April 2012
International seminar on large scale balancing from Norwegian hydropower; Sand, Norway; 11-13 September 2012
Renewable energy respecting nature – Indo-Norwegian seminar; Mumbai, India; 7-8 May 2013
Lanseringsseminar av "Håndbok for miljødesign i regulerte laksevassdrag"; Oslo; 19 September 2013
Thematic session at Energy Systems in Transition: Inter- and Transdisciplinary Contributions; Karlsruhe, Germany; 9-11 October 2013
IEA Workshop on Hydropower and Fish; Trondheim; 2-4 December 2013
10th international Symposium on Ecohydraulics 2014; Trondheim; 23-27 June 2014
World Water Week; Special event "Water as energy storage for better integration of renewables"; Stockholm, Sweden; 31 August – 5 September 2014
Seminar om energilagring (co-arranged with Bellona); Oslo; 27 September 2016
CEDREN avslutningsseminar, Trondheim; 25-26 October 2016
Norge som Europas grønne batteri - Visjoner og realiteter, NTVA/CEDREN seminar; Oslo; 16 November 2016

4 Postdocs and candidates for PhD and MSc

Postdoctoral researchers with financial support from the centre budget

Name	M/F	Nationality	Scientific area	Period in CEDREN	Scientific topic	Main contact
Roelof Frans May	M	Dutch	BirdWind	2008-2010	Spatial assessment of avian collision risks at the Smøla on-shore wind farm	Kjetil Bevanger
Line Sundt-Hansen	F	Norwegian	EnviDORR	2011-2013	Individual based Atlantic salmon population modelling for ecological forecasting based on climate scenario	Torbjørn Forseth
Andreas Melcher	M	Austrian	EnviPEAK	2010-2012	Ecosystem response to hydropowering	Tor Haakon Bakken
Stefan Jaehnert	M	German	HydroPEAK	2013-2015	Assessing capacity mechanisms in the European power system	Gerard Doorman
Pål-Tore Storli	M	Norwegian	HydroPEAK	2010-2013	Investigate the consequences on the system dynamics and the governor stability of existing hydro power in combined operation with new renewables	Torbjørn Nielsen
Susana Batel	F	Portuguese	SusGrid	2012-2014	Towards a better understanding of people's responses to renewable energy technologies: Insights from Social Representations Theory	Patrick Devine-Wright
Antti Eloranta	M	Finnish	HydroBalance	2014-2017	Modelling ecological consequences in reservoirs along environmental gradients	
Ana da Silva	F	Portuguese	SafePass	2015-2017		
Peggy Zinke	F	German	SusWater	2015-2018	Techno-ecological methods for sustainable river basin management	

PhD candidates who have completed with financial support from the centre budget

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Espen Lie Dahl	M	Norwegian		2009-2013	Population dynamics in white-tailed sea eagle at a wind-farm area in coastal Norway https://brage.bibsys.no/xmlui/handle/11250/245556	Eivin Røskaft
Helge Skoglund	M	Norwegian	Spawning and early fry survival in relation to environmental factors in regulated rivers	2007-2010	Seasonal timing of emergence from nests – Effects of temperature and competition on offspring performance in salmonid fishes	Bjørn Barlaup
Maxim Teichert	M	German	Effects of river discharge on salmonid fish production in regulated rivers	2007-2011	Regulation in Atlantic salmon (<i>Salmo salar</i>): The interaction between habitat and density https://brage.bibsys.no/xmlui/handle/11250/244954	Torbjørn Forseth
Hans Petter Fjeldstad	M	Norwegian	Salmon migration challenges and solutions in regulated rivers	2007-2012	Atlantic Salmon Migration Past Barriers https://brage.bibsys.no/xmlui/handle/11250/242176	Knut Alfredsen, Torbjørn Forseth
Roser Casas-Mulet	F	Spanish	Hydropowering	2010-2014	Dynamics of dewatering and flooding during hydropowering https://brage.bibsys.no/xmlui/handle/11250/229712	Knut Alfredsen
Michael Puffer	M	German	Density dependent habitat use and performance of salmonid fishes in regulated rivers	2009-2013	Effects of Rapidly Fluctuating Water Levels on Juvenile Atlantic Salmon (<i>Salmo salar</i> L.) https://brage.bibsys.no/xmlui/handle/11250/245421	Ole Kristian Berg
Teklu Hailegeorgis	M	Ethiopian	Development of inflow prognosis model for short term peaking operation	2010-2014	Identification of spatially distributed Precipitation-Runoff response routines for hourly simulation in gauged and ungauged basins https://brage.bibsys.no/xmlui/handle/11250/283321	Knut Alfredsen

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Eve Cathrin Walseth	F	Norwegian	Investigate performance characteristics of reversible pump turbines in both turbine, pump and condenser modes of operation with focus on stable frequency governing	2009-2016	Dynamic Behavior of Reversible Pump-Turbines in Turbine Mode of Operation	Torbjørn Nielsen
Kari Bråtevit	F	Norwegian	Effects of load fluctuations on tunnels and hydraulic structures	2011-2014	Effects of load fluctuation on hydropower tunnels https://brage.bibsys.no/xmlui/handle/11250/2364838	Nils Reidar Bøe Olsen
Kaspar Vereide	M	Norwegian	Air cushion chambers in waterways for hydropower pumped storage	2013-2016	Hydraulics and Thermodynamics of Closed Surge Tanks for Hydropower Plants https://brage.bibsys.no/xmlui/handle/11250/2385993	Leif Lia, Torbjørn Nielsen
Stephan Spiller	M	German	Physical effects of flow fluctuations in rivers due to hydropower operation	2010-2014	Physical effects of load fluctuations in rivers https://brage.bibsys.no/xmlui/handle/11250/279013	Nils Rütger
Netra Prasad Timalina	M	Nepalese	Ice conditions in regulated rivers with future scenarios for inflow and operation	2010-2014	Ice conditions in Norwegian rivers regulated for hydropower. An assessment in the current and future climate https://brage.bibsys.no/xmlui/handle/11250/242539	Knut Alfredsen
Gundula Bartzke	F	German	Effects powerline rights-of-way on habitat use, movement and behaviour of wildlife and recommendations for improved vegetation management	2009-2013	Effects of power lines on moose (<i>Alces alces</i>) habitat selection, movements and feeding activity https://brage.bibsys.no/xmlui/handle/11250/245426	Eivin Røskoft, Roel May, Sigbjørn Stokke
Etienne Bailey	M	British	Place attachment, place identity and place change: the context of a UK electricity transmission grid proposal	2011-2015	Understanding Responses To A UK High-Voltage Powerline Proposal: The Role Of Place And Project-Based Social Representations	Patrick Devine-Wright
Tor Haakon Bakken	M	Norwegian	Water consumption from hydropower production	2013-2016	An improved framework for the assessment of water consumption from hydropower production	Knut Alfredsen, Ånund Killingtveit

PhD candidates who have completed with other financial support, but associated with the centre

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Byman Hamududu	M	Zambia	Climate change, hydropower	2008-2012	Impacts of Climate Change on Water Resources and Hydropower Systems: in central and southern Africa https://brage.bibsys.no/xmlui/handle/11250/242354	Ånund Killingtveit
Solomon Bogale Gebre	M	Ethiopia	Climate change, hydropower	2009-2014	Climate Change Impacts on Winter Hydrological Regimes – Implications for Hydropower Operation https://brage.bibsys.no/xmlui/handle/11250/242458	Knut Alfredsen
Emmanuel Jjunju	M	Uganda	Climate change, hydropower	2009-2016	Integrating Climate Change in Hydropower Development in East Africa	Ånund Killingtveit, Knut Alfredsen
Bernt Kristoffer Blindheim	M	Norwegian	Political Science, Energy Policy	2012-2016	Norsk fornybarpolitikk sett fra et investorperspektiv: Utformes og utøves norsk fornybarpolitikk på en slik måte at den demper risikoen for investorer og dermed fremmer investeringer i norsk vindkraft	Oluf Langhelle

PhD students with financial support from the centre budget who still are in the process of finishing studies

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Wenche Tobiasson	F	Swedish	Grid development for a sustainable electricity sector	2012-2017	Public Engagement in Electricity Network Development: The Case of the Beaulieu-Denny Project in Scotland	Tooraj Jamasb
Signe Christensen-Dalsgaard	F	Danish	Offshore wind power plants – Effect on Seabirds	2011-2017	Offshore wind power plants – risk and consequences of breeding seabirds colliding with windmills	Eivin Røskoft, Svein-Håkon Lorentsen, Roel May
Ingeborg Graabak	F	Norwegian	Demand for energy balancing and storage	2014-2017	Balancing wind and solar power production in Northern Europe with Norwegians hydropower	Magnus Korpås
Ana Adeva Bustos	F	Spanish	A framework to determine environmental flows	2015-2018		Knut Alfredsen
Marcell Szabo-Meszaros	M	Hungarian	Links between hydraulics and fish behavior	2015-2018		Knut Alfredsen

MSc candidates with thesis related to the centre research agenda and an advisor from the centre staff

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Pernille Lund-Hoel	F	Norwegian	BirdWind	2009	Do wind-power developments affect the behaviour of White-Tailed Sea Eagles on Smøla?	Eivin Røskoft, Bård Stokke, Kjetil Bevanger, Hans Christian Pedersen
Julian Sauterleute	M	German	EnviPEAK	2009	Characterisation of rapid fluctuations in flow and assessment of fish stranding risk in rivers	
Stefan Jocham	M	German	EnviPEAK	2010	An approach to link shelter abundance and grain size distribution for the assessment of sediment quality for juvenile Atlantic Salmon	Nils Rütger
Christophe Degouy	M	French	EnviPEAK	2010	To assess environmental impacts of hydropower-induced frequent stream variations	Tor Haakon Bakken
Octavio A. Torres Q.	M	Spanish	HydroPEAK	2011	Life cycle assessment of a pumped storage power plant	Edgar Hertwich, Jan Weinzettel
Håvard Nordrum Wiggen	M	Norwegian	BirdWind	2011	Population effects of natural and wind turbine-induced mortality of willow ptarmigan	HiH
Lydia Seitz	F	German	EnviPEAK	2011	Sediment infiltration - Analysis of a laboratory study and application to a Norwegian river	Markus Noack
Morten Asbjørnsen	M	Norwegian	EnviPEAK	2011	Hvilke innvirkninger har effektkjøring på økologiske prosesser i tre norske elver?	Jan Heggenes
Steinar Tronhus	M	Norwegian	EnviPEAK	2011	Hvilke innvirkninger har effektkjøring på økologiske prosesser i tre norske elver?	Jan Heggenes
Vidar Johan Bentsen	M	Norwegian	EnviPEAK	2011	Density dependent habitat use of Atlantic salmon, <i>Salmo salar</i> L. - stranding in hydropower rivers	Ole Kristian Berg, Sigurd Einum
Frøydys Bolme Hamnes	F	Norwegian	EnviPEAK	2011	Size-dependent habitat use in juvenile Atlantic salmon (<i>Salmo salar</i> L.)	Sigurd Einum, Ole Kristian Berg
Wouter Koch	M	Dutch	EnviPEAK	2011	Density-dependent micro-habitat selection of Atlantic salmon (<i>Salmo salar</i> L.) parr in winter	Sigurd Einum
Eirik Straume Normann	M	Norwegian	EnviPEAK	2011	Spatial Distribution of Seatrout Spawning and the Effects on Juvenile Abundance in River Teigdalselva, Western-Norway	Bjørn Barlaup
Oskar Onstad	M	Norwegian	EnviPEAK	2011	Reaksjoner på effektkjøring blant laksefiskere i Nidelva i Trondheim - resultater fra fokusgruppeintervjuer og spørreundersøkelse	Øystein Aas
Ana Garcia-Escudero Uribe	F	Spanish	EnviPEAK	2011	Predicting mesohabitats in hydropeaked rivers: mapping and simulation	Knut Alfredsen, Antoni Palau, Roser Casas-Mulet

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Thibault Boissy	M	French	EnviPEAK	2011	Estimation of stranding areas during hydro peaking	Knut Alfredsén, Roser Casas-Mulet
Martin Honsberg	M	German	EnviPEAK	2011	Advanced study to link grain size distribution parameters and shelter frequency for juvenile Atlantic salmon	Nils Røther
Gøran Andre Hansen	M	Norwegian	HydroPEAK	2011	Pumpekraftverk i Kvænangen - Optimalisering	
Siri Almenning Stenhaug	F	Norwegian	HydroPEAK	2011	Modelling of ice conditions in the River Orkla	Knut Alfredsén
Line Barkved	F	Norwegian	GOVREP	2011	Established firms respond to a new environmental regulation - The Norwegian hydropower industry and the Water Framework Directive	UiO
Hagen O'Neill	F	British	OPTIPOL	2011	Response of moose (<i>Alces alces</i>) to power-line rights-of-way/forest edges in Norway	Gundula Bartzke, Rupert Quinnell (University of Leeds)
Sarah Rochelle	F	British	OPTIPOL	2011	Effects of power lines and their possible effects on the browsing behaviour of Moose (<i>Alces alces</i>) In Norway and how this relates to the browsing material available across Norway for <i>A. alces</i>	Gundula Bartzke, Sigbjørn Stokke, University of Leeds
Anne Karine Herland	F	Norwegian	EnviPEAK	2012	The effect of hydropeaking on density, diversity and species richness of mayflies (Ephemeroptera) and stoneflies (Plecoptera) in two river systems	Jo Vegar Arnekleiv
Christian Haas	M	German	EnviPEAK	2012	Investigation of fish behaviour and habitat preferences in a Norwegian river affected by hydropeaking	
Tyler King	M	American	EnviPEAK	2012	Thermal implications of hydropeaking activity in regulated arctic rivers	Knut Alfredsén, Tor Haakon Bakken, Matthew Davis
Sigrid Jacobsen Lofthus	F	Norwegian	HydroPEAK	2012	Sammenligning av små elvekraftverk og kraftverk med magasin	Ivar Wangensteen, Knut Alfredsén, Grethe Midtømme
Sigri Scott Bale	F	Norwegian	HydroPEAK	2012	Nedbørfelt som enkle, dynamiske system. Bruk av Kirchner (2009) si responsrutine i ein fordelt hydrologisk modell	Knut Alfredsén, Yisak Sultan Abdella
Carl Martin R. Klæth	M	Norwegian	HydroPEAK	2012	Tyn kraftverk - Analyse av trykk- og hastighetsforhold i tunnelsystemet	
Simen Anthon Bjøringsøy	M	Norwegian	HydroPEAK	2012	Falltap i tunneler: Sprøytebetong og ruhet	
Øyvind Pedersen	M	Norwegian	HydroPEAK	2012	3D Numerical Modelling of Hydropeaking Scenarios in Norwegian Regulated Rivers	Nils Røther
Andreas Fløystad	M	Norwegian	HydroPEAK	2012	Pumpekraftverk mellom Store Urevatnet og Vatndalsvatnet i Øvre Otra - tunnelsystem	Leif Lia, Ånund Killingtveit
Espen Austrheim Erdal	M	Norwegian	HydroPEAK	2012	Pumpe- og effektkraftverk i Nordfjord	Leif Lia, Ånund Killingtveit, Tormunn Skarstad
Lars Marius Rognlien	M	Norwegian	HydroPEAK	2012	Pumped storage hydropower development in Øvre Otra, Norway	Ånund Killingtveit
Bruno Capon	M	French	HydroPEAK	2012	The potential for Pumped Storage hydropower development in Mid-Norway	Ånund Killingtveit, Leif Lia
Benjamin Baumann	M	German	HydroPEAK	2012	Particle Image Velocimetry Measurements of Steady Flow over an Artificial Riverbed	Nils Røther
Thibault Boissy	M	French	HydroPEAK	2012	Current and future lake-ice phenology in the Nordic area	Knut Alfredsén
Birgit Longva	F	Norwegian	HydroPEAK	2012	Nytteverdien av å etablere pumpe i et eksisterende vannkraftsystem	Torbjørn Nielsen, Knut Solnørda
Andreas Mårtensson	M	Swedish	GOVREP	2012	Finding the right conditions for wind power - A business environment perspective on Sweden	
Megan Eplett	F	British	OPTIPOL	2012	Availability and use of browsing resources by (<i>Alces alces</i>) in Central Norway	Rupert Quinnell (University of Leeds)
Peter Andresen	M	Danish	SusGrid	2012	Kraftlinjen Ørskog-Fardals påvirkning på reiselivet - En kvalitativ undersøgelse af lokale reiselivsbedrifters mening	Øystein Aas
Mamuye Busier Yesuf	M	Ethiopian	EcoManage	2012	Impacts of Cascade Hydropower Power Plants on the flow of the River System and water level in Lake Turkana in Omo-Ghibe Catchment, Ethiopia	Ånund Killingtveit

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Mu-Ez Araya Tefferi	M	Ethiopian	EcoManage	2012	The Effect of Ethiopian Hydropower Reservoirs on Blue Nile River Flow Regime	Ånund Killingtveit
Phillip Thumser	M	German	EcoManage	2012	Observation and modelling of evaporation in Norway	Kolbjørn Engeland
Øystein Nordeide Kielland	M	Norwegian	EnviPEAK	2013	Size-dependent habitat use of juvenile brown trout (<i>Salmo trutta</i> L.) in an artificial river	Ole Kristian Berg, Michael Puffer
Even Lillefoss Haugen	M	Norwegian	HydroPEAK	2013	Verification of simulation program for high head power plant with air cushion	Torbjørn Nielsen
Julie Marie Hovland	F	Norwegian	HydroPEAK	2013	Pressure pulsations and stress in a high head Francis model turbine	Torbjørn Nielsen
Ingeborg Lassen Bue	F	Norwegian	HydroPEAK	2013	Pressure pulsations and stress in a high head turbine, comparison between model and geometrically similar prototype	Torbjørn Nielsen
Øystein S. Hveem	M	Norwegian	HydroPEAK	2013	Testing av regulator for små turbiner	Torbjørn Nielsen
Mons Ole Dyvik Sellevold	M	Norwegian	HydroPEAK	2013	Demping av U-rørsvingningar i vasskraftverk	Torbjørn Nielsen, Pål-Tore Storli
Kristin Tessem Kolsaker	F	Norwegian	HydroPEAK	2013	Evaluerer av modulert kavitasjon i vannkraftturbiner	Torbjørn Nielsen
Oddmund Brevik	M	Norwegian	HydroPEAK	2013	3D numerisk modellering av deler av vannvegen til Tonstad kraftverk	Nils Reidar Bøe Olsen, Kari Bråtveit
Ola Haugen Havrevoll	M	Norwegian	HydroPEAK	2013	Simulering av pumpekraftverk i LVTrans	Leif Lia, Kaspar Vereide
Ann Kristin Tuset	F	Norwegian	HydroPEAK	2013	Numerisk modellering av luftputekammer	Leif Lia, Kaspar Vereide
Sonja Huber	F	German	HydroPEAK	2013	Grain Size Analysis at Different Stages of Armor Layer Formation	Nils Rütther, Stephan Spiller, Kordula Schwarzwälder
Siv Heggen	F	Norwegian	HydroPEAK	2013	Ice breakup in small Norwegian streams	Knut Alfredsen
Stian Sjørbotten	M	Norwegian	SusGrid	2013	Kommunale påvirkningsmuligheter og interesser ved utbygging av fornybar energi – En studie av Hemne kommune i konsesjonsprosessene til små vannkraftverk og landbasert vindkraft	Espen Moe
Anne Guri Aase	F	Norwegian	EcoManage	2013	A new approach towards comparing environmental impacts from small-scale hydropower, large-scale hydropower and wind power	Päivi Lujala, Tor Haakon Bakken
Sören Weichert	M	German	EcoManage	2013	Evaluation of methods measuring the water consumption of hydropower	Knut Alfredsen, Tor Haakon Bakken
Catalina Cortines Garcia	F	Spanish	HydroBalance	2013	Testing a GIS-based methodology for optimal location of pumped storage power plants in Norway	Ånund Killingtveit
Per Johan Jakob Kristofers	M	Swedish	EnviDORR	2014	Kartläggning av fysiska faktorer som begränsar laxbeståndet i Ljungan nedströms Viforsens kraftverk	Knut Alfredsen, Morten Stickler
Arild Lote Henden	M	Norwegian	HydroPEAK	2014	Storskala pumpekraft	Gerard Doorman
Ingri Marie Hyldbakk	F	Norwegian	HydroPEAK	2014	Lønnsomhet i produksjon i et system med en stor andel fornybar energi	Gerard Doorman
Magni Fjørtoft Svarstad	M	Norwegian	HydroPEAK	2014	Pumpe- og turbinkarakteristikker i fire kvadranter	Torbjørn Nielsen, Ole Gunnar Dahlhaug
Rakel Ellingsen	F	Norwegian	HydroPEAK	2014	Stability Criteria of Reversible Pump Turbines	Torbjørn Nielsen, Pål Tore Storli
Sigurd Tangerud Haga	M	Norwegian	HydroPEAK	2014	Dynamic load on High Head Francis turbines during start/stop	Torbjørn Nielsen
Kjetil Guddal Ruud	M	Norwegian	HydroPEAK	2014	Continuous Measurements for Detection of Cavitation Caused by Transients in Hydropower Plants and Fluid Transport Systems	Torbjørn Nielsen, Morten Kjeldsen
Erik Kjøren	M	Norwegian	HydroPEAK	2014	Numerisk modellering av termodynamiske prosesser i luftputekammer	Nils Reidar Bøe Olsen, Kaspar Vereide
Britt Rasten	F	Norwegian	HydroPEAK	2014	Virkning av hydrauliske transienter på inntaksluker på Tonstad kraftverk	Leif Lia, Kaspar Vereide

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Vincenzo Sessa	M	Italian	HydroPEAK	2014	3D Numerical modeling of flow over an artificial gravel bed	Nils Rüther, Carlo Gualtieri
Felix Becker	M	German	HydroPEAK	2014	Evaluation of winter shutdown scenarios on the river Orkla	
Niccolò Bonfadini	M		Tools	2014	A high resolution flood forecasting tool and hydropower simulator	Oddbjørn Bruland
Jørgen Melhuus Rugelbak	M	Norwegian	EcoManage	2014	Analyse av vannforbruk i Kizilirmak ved bruk av WEAP-modellen	Knut Alfredsén, Tor Haakon Bakken
Ana Adeva Bustos	F	Spanish	EcoManage	2014	Modeling the trade-off between the production of Atlantic salmon (<i>Salmo salar</i>) and power at Laldal Hydropower plant	Knut Alfredsén, Håkon Sundt
Vilde Fluge Lillesund	F	Norwegian	EcoManage	2014	Land Use and Land Use Change Impacts on Terrestrial Habitats from Hydropower Development in the ICA framework	Edgar Hertwich, Dagmar Hagen, Ottar Michelsen
Narayan Hari Rijal	M	Nepalese	EcoManage	2014	Environmental flows in Nepal - an evaluation of current practices and analysis of the Upper Trishuli - I Hydroelectric Project	Knut Alfredsén
Filip Patocka	M	Czech Republic	HydroBalance	2014	Environmental Impacts of Pumped Storage Hydro Power Plants	Knut Alfredsén, Ånund Killingtveit
Carles Palou Angles	M	Spanish	Pilot studies	2015	Impacts on future climate on hydropower resources	Knut Alfredsén
Marcell Szabó-Mészáros	M	Hungarian	EnviPEAK	2015	Shelters for juvenile Atlantic salmon: availability and prediction in rivers with and without hydropower regulation	Nils Rüther, Knut Alfredsén
Vegard Pedersen Sollien	M	Norwegian	EnviPEAK	2015	Hydropeaking Effects on Riverine Benthic Invertebrate Fauna Composition and Drift	Jo Vegar Arnekleiv, Ole Kristian Berg
Christian Sørum Melaaen	M	Norwegian	HydroPEAK	2015	The impact of outages on the profitability of HVDC-cables between the Nordic area and the continent using the EMPS model	Magnus Korpås, Stefan Jaehnert
Astrid Karsrud	F	Norwegian	HydroPEAK	2015	Framtidig utvikling og sikring av tilstrekkelig rotasjonsenergi i det nordiske kraftsystemet	Magnus Korpås, Stefan Jaehnert
Ingunn Norang	F	Norwegian	HydroPEAK	2015	Pump Storage Hydropower for delivering Balancing Power and Ancillary Services – A Case Study of Illvatn Pump Storage Power Plant	Ånund Killingtveit, Leif Lia
Antoine Joquet	M	French	HydroPEAK	2015	Regional Forecasting of Inflow and Generation for Small Hydropower Plants	Ånund Killingtveit, Gerard Doorman
Mikal Naug Aas	M	Norwegian	HydroPEAK	2015	Opprustning og utviding av kraftverk (O/U) – Potensiale	Leif Lia, Ånund Killingtveit
Florence Gimbo	M	Ugandan	HydroPEAK	2015	Verification of a GIS-based system for identification of potential hydro power plant sites in Uganda	Ånund Killingtveit, Emmanuel Jjunju
Daniel Gomsrud	M	Norwegian	HydroPEAK	2015	Design of a Surge Tank Throttle for Tonstad Hydropower Plant	Leif Lia, Kaspar Vereide
Fredrik Staff Edin	M	Norwegian	HydroPEAK	2015	Innovative Surge Systems for Small Hydro	Leif Lia, Kaspar Vereide
Robert Stigen Landskaug	M	Norwegian	HydroPEAK	2015	Physical Modelling of Surge Tank Throttling	Leif Lia, Kaspar Vereide
Ida Bakke	F	Norwegian	HydroPEAK	2015	Investment in Electric Energy Storage Under Uncertainty: A Real Options Approach	Verena Hagspiel
Beate Norheim	F	Norwegian	HydroPEAK	2015	Investment in Electric Energy Storage Under Uncertainty: A Real Options Approach	Verena Hagspiel
Christian Almestad	M	Norwegian	EcoManage	2015	Modelling of water allocation and availability in Devoll River Basin, Albania	Knut Alfredsén, Tor Haakon Bakken
Hanne Kristin Ommedal	F	Norwegian	HydroBalance	2015	Cost of flexibility in the future European power system	Magnus Korpås
Andrea Cristine Otel	F	Romanian	Pilot studies	2016	Climate change impacts Norwegian hydropower systems	Knut Alfredsén
Johan Pettersson	M	Swedish	Pilot studies	2016	Vurdering av omløpskanal ved Anundsjö kraftverk	Knut Alfredsén
Lars Fossvold Strypet	M	Norwegian	HydroPEAK	2016	Litjefossen Pumpekraftverk (KVO). Utnytting av prisvariasjoner i Midt-Norge	Leif Lia
Simon Utseth Sandvåg	M	Norwegian	HydroPEAK	2016	Surge Tank Atlas for Hydropower Plants	Leif Lia, Kaspar Vereide

Name	M/F	Nationality	Scientific area	Period in CEDREN	Thesis title	Main thesis advisor
Eirik Leknes	M	Norwegian	HydroPEAK	2016	Comparison of the Sweeney and Thoma Stability Criteria for Mass Oscillations in Surge Tanks	Leif Lia, Kaspar Vereide
Ingrid Alne	F	Norwegian	Tools	2016	Topo-Bathymetric LiDAR for Hydraulic Modelling	Knut Alfredsen, Ana Adevo Bustos
Magnus Mikkelsen Bjerkeli	M	Norwegian	Tools	2016	Todimensjonal numerisk modellering av strømnig i elver og renne	Nils Reidar Bøe Olsen
Shishay Yemane Gebru	M	Ethiopian	EcoManage	2016	The Role of Reservoirs in Drought Mitigation in Ethiopia, Awash River Basin	Knut Alfredsen, Tor Haakon Bakken
Bewuket Abebe Tesfaw	M	Ethiopian	EcoManage	2016	Optimize operation and future development on multi-purpose Tana-Beles hydropower project	Ånund Killingtveit
Ana Cristina Sanchez Perez	F	Spanish	EcoManage	2016	Reducing Urban Water System's Carbon Footprint and Reservoir Water Balance Study in Ceuta, Spain	Brian Glover
Magnus Askeland	M	Norwegian	HydroBalance	2016	Analysis of the Profitability of Energy Storage for RES in an Equilibrium Model of the Power Market	Magnus Korpås, Stefan Jaehnert
Arne Øvrebø Lie	M	Norwegian	HydroBalance	2016	Analyzing the Integration of Renewable Energy in Interconnected Power Systems Using a Flow-based Market Model	Hossein Farahmand, Magnus Korpås, Harald G. Svendsen
Eirik Andre Rye	M	Norwegian	HydroBalance	2016	Analyzing the Integration of Renewable Energy in Interconnected Power Systems Using a Flow-based Market Model	Hossein Farahmand, Magnus Korpås, Harald G. Svendsen
Ingrid Tjøllaug Løvstad	F	Norwegian	HydroBalance	2016	Balancing Market integration in Northern Europe – A 2020 case study	Hossein Farahmand
Eirik Bruvik Øvregård	M	Norwegian	SafePass	2016	Head losses and flow field at trash racks	Jochen Aberle, Christy Ushanth Navaratnam, Marcell Szabo-Meszaros
Erik Solli	M	Norwegian	HydroBalance	2017	Balancing of short term wind and solar resource variability with energy storage	Ingeborg Graabak, Magnus Korpås

5 Publications

Articles published in scientific/scholarly journals or series

No.	Author(s)	Title of the work	Title of book/compenn-dium/ journal/newspaper	Page no.	Issue/Volume/Year	ISSN
0.1.10 2013	Tor Haakon Bakken, Eva Skarbøvik, A.K. Gosain, K. Palanisami, Julian Sauterleute, Helene Egeland, K. R. Kakumanu, Nagothu Udaya Sekhar, Atle Harby, K. Tirupataiah, Per Stålnacke	Water Allocation With Use of the Building Block Methodology (BBM) in the Godavari Basin, India	Journal of Sustainable Development		Vol 6, No 8, 2013	ISSN 1913-9063 (Print) (1) ISSN 1913-9071 (Online) DOI: 10.5539/jsd.v6n8p93
0.1.17 2011	Vincent Chanudet, Stéphane Descloux, Atle Harby, Håkon Sundt, Bjørn Henrik Hansen, Odd Brakstad, Dominique Serça, Frédéric Guerin	Gross CO2 and CH4 emissions from the Nam Ngum and Nam Leuk sub-tropical reservoirs in Lao PDR	Science of the Total Environment	5382-5391	409(24) 15, November 2011	0048-9697 (2)
0.1.18 2011	Priska H. Hiller, Kathrina Steffen, Robert M. Boes, Ånund Killingveit	Determining minimal residual flow at waterfalls used for hydropower	International Journal on Hydropower and Dams	76-82	Volume 18(4), 2011	1352-2523 (1)
1.2.5 2012	Henrik Brøseth, Erlend B. Nilsen, Hans Christian Pedersen	Temporal quota corrections based on timing of harvest in a small game species	European Journal of Wildlife Research	797-802	2012	1612-4642 (1) DOI: 10.1007/s10344-012-0625-3
1.4.1 2011	Torgeir Nygård, Kjetil Bevanger, Espen Lie Dahl, Øystein Flagstad, Arne Follestad, Pernille Lund-Hoel, Roel May, Ole Reitan	A study of white-tailed eagle <i>Haliaeetus albicilla</i> movements and mortality at a wind farm in Norway	IBIS, British Ornithologists Union Proceedings, Climate Change and Birds		2010	0019-1019 (1)
1.4.8 2011	Espen Lie Dahl, Kjetil Bevanger, Torgeir Nygård, Eivin Røskaft, Bård Gunnar Stokke	Reduced breeding success in white-tailed eagles at Smøla windfarm, western Norway, is caused by mortality and displacement	Biological Conservation	79-85	145(1), 2012	0006-3207 (1) DOI: 10.1016/j.biocon.2011.10.012
1.4.13 2012	David J. T. Douglas, Arne Follestad, Rowena H. W. Langston, James W. Pearce-Higgins	Modelled sensitivity of avian collision rate at wind turbines varies with number of hours of flight activity input data	The International Journal of Avian Science		2012	DOI: 10.1111/j.1474-919X.2012.01239.x
1.4.15 2013	Roel May, Torgeir Nygård, Espen Lie Dahl, Kjetil Bevanger	Habitat Utilization in White-Tailed Eagles (<i>Haliaeetus albicilla</i>) and the Displacement Impact of the Smøla Wind-Power Plant	Wildlife Society Bulletin	75-83	Volume 37, 2013	1938-5463 (1) DOI: 10.1002/wsb.264
1.4.17 2013	Espen Lie Dahl, Roel May, Pernille Lund Hoel, Kjetil Bevanger, Hans Christian Pedersen, Eivin Røskaft, Bård Gunnar Stokke	White-tailed eagles (<i>Haliaeetus albicilla</i>) at the Smøla wind-power plant, Central Norway, lack behavioral flight responses to wind turbines	Wildlife Society Bulletin	66-74	Volume 37, 2013	1938-5463 (1) DOI: 10.1002/wsb.258
1.4.18 2013	Scott G. Cole, Espen Lie Dahl	Compensating white-tailed eagle mortality at the Smøla wind-power plant using electrocution prevention measures	Wildlife Society Bulletin	84-93	Volume 37, 2013	1938-5463 (1) DOI: 10.1002/wsb.263
1.9.4 2014	Aurore Ponchon, David Grémillet, Signe Christensen-Dalsgaard, Kjell Einar Erikstad, Robert T. Barrett, Tone K. Reiertsen, Karen D. McCoy, Torkild Tveraa, Thierry Boulinier	When things go wrong: intra-season dynamics of breeding failure in a seabird	Ecosphere	1-19	Article 4, Volume 5(1), January 2014	2150-8925 (1)
2.0.4 2011	Knut Alfredsen, Atle Harby, Tommi Linnensaari, Ola Ugedal	Development of an inflow-controlled environmental flow regime for a Norwegian river	River Research and Applications	731-739	28(6), 2012	1535-1459 (1) DOI: 10.1002/rra.1550

No.	Author(s)	Title of the work	Title of book/ compendium/ journal/ newspaper	Page no.	Issue/ Volume/ Year	ISSN
2.1.3 2011	Maxim A.K. Teichert, Anders Foldvik, Torbjørn Forseth, Ola Ugedal, Sigurd Einum, Anders G. Finstad, Richard Hedger, E. Bellier	Effects of spawning distribution on juvenile Atlantic salmon (<i>Salmo salar</i>) density and growth	Canadian Journal of Fisheries and Aquatic Sciences	43-50	68(1), 2011	0706-652X (1) DOI: 10.1139/F10-141
2.1.4 2012	Hans Petter Fjeldstad, Ingebrigt Uglem, Ola H. Diserud, Peder Fiske, Torbjørn Forseth, Eli Kvingedal, Nils Arne Hvidsten, Finn Økland, Johanna Järnegren	A concept for improving Atlantic salmon <i>Salmo salar</i> smolt migration past hydro power intakes	Journal of Fish Biology	642-663	81 2, 2012	0022-1112 (1) DOI: 10.1111/j.1095-8649.2012.03363.x
2.1.8 2013	Hans-Petter Fjeldstad, Knut Alfredsén, Torbjørn Forseth	Atlantic salmon fishways: The Norwegian experiences	VANN	191-204	Volume 48(2), 2013	0042-2592 (1)
2.1.12 2010	Maxim A.K. Teichert, Eli Kvingedal, Torbjørn Forseth, Ola Ugedal, Anders G. Finstad	Effects of discharge and local density on the growth of juvenile Atlantic salmon <i>Salmo salar</i>	Journal of Fish Biology	1751-1769	76(7), 2010	0022-1112 (1)
2.1.15 2011	Helge Skoglund, Sigurd Einum, Torbjørn Forseth, Bjørn Torgeir Barlaup	The penalty for arriving late in emerging salmonid juveniles: differences between species correspond to their interspecific competitive ability	Functional Ecology	104-111	26(1), 2012	0269-8463 (2) DOI: 10.1111/j.1365-2435.2011.01901.x
2.1.17 2011	Helge Skoglund, Sigurd Einum, Torbjørn Forseth, Bjørn Torgeir Barlaup	Phenotypic plasticity in physiological status at emergence from nests as a response to temperature in Atlantic salmon (<i>Salmo salar</i>)	Canadian Journal of Fisheries and Aquatic Sciences	1470-1479	Vol. 68, No. 8, 2011	0706-652X (1) DOI: 10.1139/f2011-056
2.1.18 2011	Helge Skoglund, Sigurd Einum, Grethe Robertsen	Competitive interactions shape offspring performance in relation to seasonal timing of emergence in Atlantic salmon	Journal of Animal Ecology	365-374	80(2), 2011	0021-8790 (2) DOI: 10.1111/j.1365-2656.2010.01783.x
2.1.19 2013	Svein Jakob Saltveit, Åge Brabrand	Incubation, hatching and survival of eggs of Atlantic salmon (<i>Salmo salar</i>) in spawning redds influenced by groundwater	Limnologica	325-331	43, 2013	0075-9511 (1) DOI: 10.1016/j.limno.2013.05.009
2.1.22 2014	Maxim A.K. Teichert, Sigurd Einum, Anders G. Finstad, Ola Ugedal, Torbjørn Forseth	Ontogenetic timing of density dependence: location-specific patterns reflect distribution of a limiting resource	Population Ecology	575-583	2013:55	1438-3896 (1) DOI: 10.1007/s10144-013-0387-0
2.1.24 2013	Hans-Petter Fjeldstad, Knut Alfredsén, Thibault Boissy	Optimizing Atlantic salmon smolt survival by use of hydropower simulation modelling in a regulated river	Fisheries Management and Ecology	22-31	Volume 21, Issue 1, February 2014	0969-997X (1) DOI: 10.1111/fme.12044
2.1.25 2011	Hans-Petter Fjeldstad, Bjørn Torgeir Barlaup, Morten Stickler, S.-E. Gabrielsen, Knut Alfredsén	Removal of weirs and the influence on physical habitat for salmonids in a Norwegian river	River Research and Applications	753-763	28/6, 2012	1535-1459 (1) DOI: 10.1002/rra.1529
2.1.30 2013	Hans-Petter Fjeldstad	Terskel fjerning og andre tiltak for å bedre vandringsforholdene for laksefisk	VANN	123-129	1, 2013	0042-2592 (1)
2.4.1 2013	Richard D. Hedger, Line Sundt-Hansen, Torbjørn Forseth, Ola Håvard Diserud, Ola Ugedal, Anders Gravbrøt Finstad	Modelling the complete life-cycle of Atlantic salmon (<i>Salmo salar</i> L.) using a spatially explicit individual-based approach	Ecological Modelling	119-129	Volume 248, 2013	0304-3800 (1) DOI: 10.1016/j.ecolmodel.2012.10.003
2.4.2 2014	Richard D. Hedger, Line Sundt-Hansen, Torbjørn Forseth, Ola Ugedal, Ola Håvard Diserud, Å.S. Kvambekk, Anders Gravbrøt Finstad	Predicting climate change effects on subarctic/Arctic populations of Atlantic salmon (<i>Salmo salar</i> L.)	Canadian Journal of Fisheries and Aquatic Sciences	159-168	Volume 70(2), 2013	0706-652X (1) DOI: 10.1139/cjfas-2012-0205
2 2012	Michael J. Dunbar, Knut Alfredsén, Atle Harby	Hydraulic-habitat modelling for setting environmental river flow needs for salmonids	Fisheries Management and Ecology	500-517	Volume 19(6), 2012	0969-997X (1) DOI: 10.1111/j.1365-2400.2011.00825.x

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2	Knut Wiik Vollset, Helge Skoglund, Bjørn Torgeir Barlaup, Ulrich Pulg, Sven Erik Gabrielsen, Tore Wiers, Bjørnar Skår, Gunnar Bekke Lehmann	Can the river location within a fjord explain the density of Atlantic salmon and sea trout?	Marine Biology Research	268-278	10/2014	1745-1000 (1)
3.0.15-2 2013	Atle Harby, Marcus Noack	Rapid Flow Fluctuations and Impacts on Fish and the Aquatic Ecosystem	Ecohydraulics: An Integrated Approach Pages 323-334	323-335	2013	978-0-470-97600-5
3.1.24 2014	Roser Casas-Mulet, Knut Alfredsen, Thibault Boissy, Håkon Sundt, Nils Rütger	Performance of a one-dimensional hydraulic model for the calculation of stranding areas in hydropeaked rivers	River Research and Applications	143-155	2014	1535-1459 (1) DOI: 10.1002/rra.2734
3.1.28 2016	Tor Haakon Bakken, Tyler King, Knut Alfredsen	Simulation of river water temperatures during various hydro-peaking regimes	Journal of Applied Water Engineering and Research	31-43	Volume 4(1), 2016	2324-9676 (1) DOI: 10.1080/23249676.2016.1181578
3.1.35 2014	Roser Casas-Mulet, Knut Alfredsen, A. Garcia-Escudero	A cost-effective approach to predict dynamic variations of mesohabitats at the river scale in Norwegian systems	International Journal of River Basin Management	145-159	Volume 12 (2), 2014	1571-5124 (1)
3.1.39 2015	Peggy Zinke, Claude Flener	Experiences from the use of Unmanned Aerial Vehicles (UAV) for River Bathymetry Modelling in Norway	VANN	351-360	48(3) 11/2013	0042-2592 (1)
3.1.41 2014	Roser Casas-Mulet, Knut Alfredsen, Byman Hamududu, Netra Timalisina	The effects of hydropeaking on hyporheic interactions based on field experiments	Hydrological Processes	1370-1384	Volume 29(6), 2014	0885-6087 (1)
3.1.42 2014	Roser Casas-Mulet, Svein Jakob Saltveit, Knut Alfredsen	The survival of Atlantic salmon (Salmo salar) eggs during dewatering in a river subject to hydropeaking	River Research and Applications	433-446	Volume 31(4), 2015	1535-1459 (1) DOI: 10.1002/rra.2827
3.1.43 2014	Roser Casas-Mulet, Knut Alfredsen, Åge Brabrand, Svein Jakob Saltveit	The survival of eggs of Atlantic Salmon (Salmo salar) in a draw down zone in a regulated river influenced by groundwater	Hydrobiologia	269-284	Volume 743(1), 2015	0018-8158 (1)
3.1.45 2016	Matthias Schneider, Ianina Kopecki, Jeffrey A. Tuhian, Julian Sauterleute, Peggy Zinke, Tor Haakon Bakken, Tania Zakowski, S. Merigoux	A Fuzzy Rule-Based Model For The Assessment of Macrobenthic Habitats under hydropeaking impact	River Research and Applications		2016	1535-1459 (1) DOI: 10.1002/rra.3079
3.1.47 2015	Roser Casas-Mulet, Knut Alfredsen, Ånund Killingtveit	Modelling of environmental flow options for optimal Atlantic salmon (Salmo salar) embryo survival during hydropeaking	Fisheries Management and Ecology	480-490	Volume 21 (6), 2014	0969-997X (1)
3.1.51 2015	Mauro Carolli, Davide Vanzo, Annunziato Siviglia, Guido Zolezzi, Maria Cristina Bruno, Knut Alfredsen	A simple procedure for the assessment of hydropeaking flow alterations applied to several European streams	Aquatic Sciences	639-653	Volume 77, Issue 4, October 2015	1015-1621 (1) DOI: 10.1007/s00027-015-0408-5
3.1.52 2016	Roser Casas-Mulet, Knut Alfredsen, Åge Brabrand, Svein Jakob Saltveit	Hydropower operations in groundwater-influenced rivers: implications for Atlantic salmon, Salmo salar, early life stage development and survival	Fisheries Management and Ecology	144-151	Volume 23, 2016	0969-997X (1) DOI: 10.1111/fme.12165
3 2016	Christian Haas, Peggy Zinke, Knut Wiik Vollset, Julian Sauterleute, Helge Skoglund	Behaviour of spawning Atlantic salmon and brown trout during ramping events	Journal of Applied Water Engineering and Research		2016	2324-9676 (1) DOI: 10.1080/23249676.2016.1169227

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3 2016	Knut Wiik Vollset, Helge Skoglund, T. Wiers, Bjørn Barlaup	Effects of hydropeaking on the spawning behaviour of Atlantic salmon (<i>Salmo salar</i>) and brown trout (<i>Salmo trutta</i>)	Journal of Fish Biology		2016	0022-1112 (1) DOI: 10.1111/jfb.12985
3 2016	Isabel Boavida, Atle Harby, Keith D. Clarke, Jan Heggenes	Move or stay: habitat use and movements by Atlantic salmon parr (<i>Salmo salar</i>) during induced rapid flow variations	Hydrobiologia		2016	0018-8158 (1) DOI: 10.1007/s10750-016-2931-3
3 2016	Julian Sauterleute, Richard D. Hedger, Christoph Hauer, Ulrich Pulg, Helge Skoglund, Line Sundt-Hansen, Tor Haakon Bakken, Ola Ugedal	Modelling the effects of stranding on the Atlantic salmon population in the Dale River, Norway	Science of the Total Environment	574-584	Volume 573, 2016	0048-9697 (2) DOI: 10.1016/j.scitotenv.2016.08.080
3.2.5 2012	Ulrich Pulg, Bjørn Torgeir Barlaup, Katharina Sterneckner, Ludwig Trepl, Günther Unfer	Restoration of Spawning Habitats of Brown Trout (<i>Salmo trutta</i>) in a Regulated Chalk Stream	River Research and Applications	172-182	2013:29	1535-1459 (1) DOI: 10.1002/rra.1594
3.2.7 2010	Tommi Linnansaari, A. Keskinen, A. Romakkaniemi, J. Erkinaro, P. Orell	Deep habitats are important for juvenile Atlantic salmon <i>Salmo salar</i> L. in large rivers	Ecology of Freshwater Fish	618-626	19/4, 2010	0906-6691 (1) DOI: 10.1111/j.1600-0633.2010.00443.x
3.2.24 2017	Michael Puffer, Ole Kristian Berg, Sigurd Einum, Svein Jakob Saltveit, Torbjørn Forseth	Energetic Consequences of Stranding on Juvenile Atlantic Salmon (<i>Salmo salar</i> L.)	Journal of Water Resource and Protection	163-182	Volum 9, 2017	1945-3094
3.2.26 2013	Duncan Halley, Ivonne Teurlings, Hannah Welsh, Claire Taylor	Distribution and patterns of spread of recolonising Eurasian beavers (<i>Castor fiber</i> Linnaeus 1758) in fragmented habitat, Agdenes peninsula, Norway	Fauna Norvegica	1-12	Vol. 32, 2013	1502-4873 (1) DOI: 10.5324/fn.v31i0.1438
3.2.39 2014	Michael Puffer, Ole Kristian Berg, Ari Huusko, Teppo Vehanen, Sigurd Einum, Torbjørn Forseth	Seasonal effects of hydropeaking on growth, energetics and movement on juvenile Atlantic salmon (<i>Salmo salar</i> L.)	River Research and Applications	1101-1108	Volume 31, Issue 9, November 2015	1535-1459 (1) DOI: 10.1002/rra.2801
3.2.40 2013	Ole Kristian Berg, Gunnbjørn Bremset, Michael Puffer, Kjersti Hanssen	Selective segregation in intraspecific competition between juvenile Atlantic salmon (<i>Salmo salar</i>) and brown trout (<i>Salmo trutta</i>)	Ecology of Freshwater Fish	544-555	2014	0906-6691 (1) DOI: 10.1111/eff.12107
3.2 2015	Michael Puffer, Ole Kristian Berg, Ari Huusko, Teppo Vehanen, Sigurd Einum	Effects of intra- and interspecific competition and hydropeaking on growth of juvenile Atlantic salmon (<i>Salmo salar</i>)	Ecology of Freshwater Fish		2015	0906-6691 (1) DOI: 10.1111/eff.12258
3.3.4 2013	Øystein Aas, Oskar Onstad	Strategic and temporal substitution among anglers and white-water kayakers – The case of an urban regulated river	Journal of Outdoor Recreation and Tourism	1-8	Volum1-2, 2013	2213-0780 (1) DOI: 10.1016/j.jort.2013.04.002
3.4.10 2013	Peggy Zinke, Jim Bogen	Effect of water level regulation on gradients and levee deposits in the Lake Øyeren delta, Norway	Hydrology Research	523-537	Volume 44(3), 2013	1998-9563 (1) DOI: 10.2166/nh.2012.097
3.4.14 2014	Stefan Schmutz, Tor Haakon Bakken, Thomas Friedrich, Franz Greimel, Atle Harby, Mathias Jungwirth, Andreas Melcher, Günther Unfer, Bernhard Zeiringer	Response of fish communities to hydrological and morphological alterations in hydropeaking rivers of Austria	Rivers Research and Applications	919-930	Volume 31(8), 2015	1535-1459 (1) DOI: 10.1002/rra.2795
3 2016	Andreas H. Melcher, Tor Haakon Bakken, Thomas Friedrich, Franz Greimel, Nona Humer, Stefan Schmutz, Bernhard Zeiringer, J. Angus Webb	Drawing together multiple lines of evidence from assessment studies of hydropeaking pressures in impacted rivers	Freshwater Science		2016	2161-9549 (1) DOI: 10.1086/690295

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3 2017	Aile Harby, Francisco Martinez-Capel, Nicolas Lamouroux	From Microhabitat Ecohydraulics to an Improved Management of River Catchments: Bridging the gap Between Scales	River Research and Applications	189-191	Volume 33, Issue 2, February 2017	DOI: 10.1002/rra.3114
3.6.5 2014	Julian Sauterleute, Julie Charmasson	A computational tool for the characterisation of rapid fluctuations in flow and stage in rivers caused by hydropeaking	Environmental Modelling & Software	266-278	Volume 55, May 2014	1364-8152 (2) DOI: 10.1016/j.envsoft.2014.02.004
4.0.7 2012	Byman Hamududu, Ånund Killingtveit	Assessing of Climate Change Impacts on Global Hydropower	Energies	305-322	Volume 5, Issue 2, 2012	1996-1073 (1) DOI: 10.3390/en5020305
4 2015	Byman Hamududu, Ånund Killingtveit	Impacts of Climate change on Water Resources and Hydropower production at Inga Falls in Congo River	International Journal on Hydropower and Dams – Special Edition about Africa at HYDRO2015	10-14	2015	
4 2015	Emmanuel Jjunju, Ånund Killingtveit	Modeling climate change impacts on hydropower in East-Africa	International Journal on Hydropower and Dams – Special Edition about Africa at HYDRO2015	15-20	2015	
4 2016	Byman Hamududu, Ånund Killingtveit	Hydropower Production in Future Climate Scenarios: The Case for Kwanza River, Angola	Energies		Volume 9 (5), 2016	1996-1073 (1) DOI: 10.3390/en9050363
4 2016	Byman Hamududu, Ånund Killingtveit	Hydropower Production in Future Climate Scenarios: The Case for the Zambesi River	Energies		Volume 9 (7), 2016	1996-1073 (1)
4.2.7 2013	Teklu T. Hailegeorgis, Sveinn T. Thorolfsson, Knut Alfredsén	Regional Frequency Analysis of Extreme Precipitation with Consideration of Uncertainties to Update IDF Curves for the City of Trondheim	Journal of Hydrology	305-318	Volume 498, 2013	0022-1694 (2) DOI: 10.1016/j.jhydrol.2013.06.019
4.2.15 2014	Teklu T. Hailegeorgis, Knut Alfredsén	Comparative evaluation of performances of different conceptualizations of distributed HBV runoff response routines for prediction of hourly streamflow in boreal mountainous catchments	Hydrology Research	607-628	46 (4), 2015	1998-9563 (1) DOI: 10.2166/nh.2014.051
4.2.18 2015	Teklu T. Hailegeorgis, Yisak S. Abdella, Knut Alfredsén, Sjur Kolberg	Evaluation of Regionalization Methods for Hourly Continuous Streamflow Simulation Using Distributed Models in Boreal Catchments	Journal of hydro-logic engineering		Volume 20, 2015	1084-0699 (2)
4.2.19 2016	Teklu T. Hailegeorgis, Knut Alfredsén	Multi-basin and regional calibration based identification of distributed precipitation-runoff models for hourly runoff simulation: calibration and transfer of full and partial parameters	Hydrology Research	239-259	47 (2), 2016	1998-9563 (1) 10.2166/nh.2015.174
4.2 2015	Teklu T. Hailegeorgis, Knut Alfredsén, Yisak S. Abdella, Sjur Kolberg	Evaluation of different parameterizations of the spatial heterogeneity of subsurface storage capacity for hourly runoff simulation in boreal mountainous watershed	Journal of Hydrology	522-533	Volume 522, 2015	0022-1694 (2)
4.2 2015	Teklu Tesfaye Hailegeorgis, Knut Alfredsén	Comparative evaluation of performances of different conceptualisations of distributed HBV runoff response routines for prediction of hourly streamflow in boreal mountainous catchments	Hydrology Research	607-628	Volume 46(4), 2015	1998-9563 (1)

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4.2 2016	Teklu T. Hailegeorgis, Yisak S. Abdella, Knut Alfredsen, Sjur Kolberg	Evaluation of storage–discharge relationships and recession analysis-based distributed hourly runoff simulation in large-scale, mountainous and snow- influenced catchment	Hydrological Sciences Journal	2872-2886	61 (16), 2016	0262-6667 (1) 10.1080/02626667.2016.1170939
4.2 2017	Teklu Tesfaye Hailegeorgis, Knut Alfredsen	Regional Statistical and Precipitation–Runoff Modelling for Ecological Applications: Prediction of Hourly Streamflow in Regulated Rivers and Ungauged Basins	Rivers Research and Applications	233-248	Volume 33, Issue 2, February 2017	1535-1459 (1) 10.1002/rra.3006
4.4.22 2014	Torbjørn .K. Nielsen, Magni Fjærtøft Svarstad	Unstable behavior of RPT when testing turbine characteristics in the laboratory	IOP Publications		2014	27 th IAHR Symposium on Hydraulic Machinery and Systems; Montreal, Canada; 22-26 Sept. 2014
4.4.26 2016	Eve Cathrin Walseth, Torbjørn K. Nielsen, Bjørnar Svingen	Measuring the Dynamic Characteristics of a Low Specific Speed Pump–Turbine Model	Energies	-12	Volume 9(3), 2016	1996-1073 (1) DOI: 10.3390/en9030199
4.5.12 2014	Torbjørn K. Nielsen, Pål-Tore Storli	Measurements and Simulations of Turbines on common grid	IOP Publications		2014	27 th IAHR Symposium on Hydraulic Machinery and Systems; Montreal, Canada; 22-26 Sept. 2014
4.5.13 2014	Pål-Tore Storli, Torbjørn K. Nielsen	Dynamic loads on Francis turbines runner from simulations based on measurements	IOP Publications		2014	27 th IAHR Symposium on Hydraulic Machinery and Systems; Montreal, Canada; 22-26 Sept. 2014
4.5 2015	Rakel Ellingsen, Pål-Tore Selbo Storli	Simulations of the dynamic load in a francis runner based on measurements of grid frequency variations	International Journal of Fluid Machinery and Systems	102-112	Volum 8.(2), 2015	1882-9554 (1)
4.6.3 2012	Kari Bråtveit, Leif Lia, Nils Reidar Bøe Olsen	An efficient method to describe the geometry and the roughness of an existing unlined hydro power tunnel	Energy Procedia	200-206	Volume 20, 2012	1876-6102 (1) DOI: 10.1016/j.egypro.2012.03.020
4.6.8-1 2013	Kari Bråtveit, Oddmund Brevik, Nils Reidar Bøe Olsen	Three Dimensional Numerical Study of an Unlined Pressurized Rock-Blasted Sand Trap	Proceedings of the 35 th IAHR World Congress. China: Tsinghua University		2013	ISBN 978-7-89414-588-8
4.6.17 2015	Kari Bråtveit, Nils Reidar Bøe Olsen	Calibration of Horizontal Acoustic Doppler Current Profilers by three dimensional CFD simulations	Engineering Applications of Computational Fluid Mechanics	41-49	Vol. 9, No. 1, 2015	1994-2060 (1)
4.6 2016	Kari Bråtveit, Amund Bruland, Oddmund Breivik	Rock falls in selected Norwegian hydropower tunnels subjected to hydropeaking	Tunnelling and Underground Space Technology	202-207	Volume 52, 2016	0886-7798 (1) DOI: 10.1016/j.tust.2015.10.003
4.6	Kaspar Vereide, Leif Lia, Torbjørn Kristian Nielsen	Monte Carlo Simulation for Economic Analysis of Hydropower Pumped Storage Projects in Nepal	Hydro Nepal: Journal of Water, Energy and Environment	39-44	12, 2013	1998-5452 (1) DOI: dx.doi.org/10.3126/hn.v12i0.9031
4.6	Kaspar Vereide, Leif Lia, Lars Ødegård	Physical Modelling of Hydropower Waterway with Air Cushion Surge Chamber			2014	5 th IAHR International Symposium on Hydraulic Structures; Brisbane, Australia; 25-27 June 2014; DOI: 10.14264/uql.2014.28
4.6.24 2015	Kaspar Vereide, Torbjørn Tekle, Torbjørn Nielsen	Thermodynamic Behavior and Heat Transfer in Closed Surge Tanks for Hydropower Plants	Journal of Hydraulic Engineering		Vol. 141, Issue 6, 2015	0733-9429 (2) DOI: 10.1061/(ASCE)HY.1943-7900.0000995, 06015002

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4.6.29 2015	Kaspar Vereide, Leif Lia, Torbjørn Nielsen	Hydraulic scale modelling and thermodynamics of mass oscillations in closed surge tanks	Journal of Hydraulic Research	519-524	Vol. 53, Issue 4, 2015	0022-1686 (1) DOI: 10.1080/00221686.2015.1050077
4.6.31 2015	Kaspar Vereide, Wolfgang Richter, Gerald Zenz, Leif Lia	Surge Tank Research in Austria and Norway	Wasserwirtschaft	58-62	Volum 105.(1), 2015	0043-0978 (1)
4.7.2 2012	Stephan Spiller, Nils Rütger, Kiflom Belete, Brandon Strellis	Assessing environmental effects of hydropower peaking by 3D numerical modeling	Dresdner wasserbauliche Mitteilungen	79-86	Volume 1, 2011	
4.7.17	Stephan Spiller, Nils Rütger, Benjamin Baumann	Form-induced stress in non-uniform steady and unsteady open channel flow over a static rough bed	International Journal of Sediment Research	297-305	Volume 30, Issue 4, December 2015	1001-6279 (1) DOI: 10.1016/j.ijsc.2014.10.002
4.7.18	Stephan Spiller, Nils Rütger, Heide Friedrich	Dynamic lift on an artificial static armor layer during highly unsteady flow	Water	4951-4970	7, 2015	2073-4441 (1) DOI: 10.3390/w7094951
4.8.6 2013	Solomon Bogale Gebre, Knut Alfredsen, Leif Lia, Morten Stickler, Einar Tesaker	Ice Effects on Hydropower Systems – A Review	Journal of Cold Regions Engineering	196-222	27, 2013	0887-381X (1) DOI: 10.1061/(ASCE)CR.1943-5495.0000059
4.8.7	Solomon Bogale Gebre, Thibault Boissy, Knut Alfredsen	Simulation of lake ice characteristics under future climate		234-239	2012	Proceeding of FcoE in 'Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change' and NcoE in 'Cryosphere – Atmosphere Interactions in a Changing Climate'. : Finnish Association for Aerosol Research FAAR 2012 ISBN 978-952-5822-61-8
4.8.10-1 2012	Terry Prowse, Knut Alfredsen, Spyros Beltaos, Barrie R. Bonsal, Claude R. Duguay, Atte Korhola, Jim McNamara, Warwick F. Vincent, Valery Vuglinsky, Gesa A. Weyhenmeyer	Arctic freshwater ice and its climatic role	Ambio	46-52	Volume 40, Supplement 1, 2011	0044-7447 (1) DOI: 10.1007/s13280-011-0214-9
4.8.10-2 2012	Terry Prowse, Knut Alfredsen, Spyros Beltaos, Barrie R. Bonsal, William B. Bowden, Claude R. Duguay, Atte Korhola, Jim McNamara, Warwick F. Vincent, Valery Vuglinsky, Gesa A. Weyhenmeyer	Past and future changes in Arctic lake and river ice	Ambio	53-62	Volume 40, Supplement 1, 2011	0044-7447 (1) DOI: 10.1007/s13280-011-0216-7
4.8.10-3 2012	Terry Prowse, Knut Alfredsen, Spyros Beltaos, Barrie R. Bonsal, William B. Bowden, Claude R. Duguay, Atte Korhola, Jim McNamara, Warwick F. Vincent, Valery Vuglinsky, Katey M. Walter Anthony, Gesa A. Weyhenmeyer	Effects of Changes in Arctic Lake and River Ice	Ambio	63-74	Volume 40, Supplement 1, 2011	0044-7447 (1) DOI: 10.1007/s13280-011-0217-6
4.8.13 2013	Netra P. Timalisina, Julie Charmasson, Knut T. Alfredsen	Simulation of the ice regime in a Norwegian regulated river	Cold Regions Science and Technology	61–73	Volume 94, 2013	0165-232X (2) DOI: 10.1016/j.coldregions.2013.06.010
4.8.17 2013	Solomon Gebre, Thibault Boissy, Knut Alfredsen	Sensitivity of lake ice regimes to climate change in the Nordic region	The Cryosphere	1589-1605	Volume 8, 2014	1994-0416 (1) www.the-cryosphere.net/8/1589/2014/tc-8-1589-2014.pdf

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4.8.18 2013	Hargewoin Haile Chernet, Knut Alfredsén, Ånund Killingtveit	The impacts of climate change on a Norwegian high-head hydropower system	Journal of Water and Climate	17-37	Volume 4(1), 2013	2040-2244 (1) DOI: 10.2166/wcc.2013.042
4.8.19 2016	Netra P. Timalisina, Felix Beckers, Knut Alfredsén	Modelling winter operational strategies of a hydropower system	Cold Regions Science and Technology	1-9	Volume 122, 2016	0165-232X (2) DOI: 10.1016/j.coldregions.2015.11.002
4.8.21 2013	Knut Alfredsén, Morten Stickler	Dynamic ice formation processes in two Norwegian rivers – implications for the environment and hydropower		1-10	2013	Proceedings of the 17th Workshop on the Hydraulics of Ice Covered Rivers. Edmonton, Canada: Committee on River Ice Processes and the Environment 2013
4.8.22 2013	Gebre, Solomon Bogale; Boissy, Thibault; Alfredsén, Knut	Modeling thermal structure, ice cover regime and sensitivity to climate change of two regulated lakes – a Norwegian case study	Geophysical Research Abstracts		Volume 15, 2013	1029-7006 (0) EGU2013-4931, 2013; EGU General Assembly 2013; Vienna, Austria
4.8.24 2013	Bijay Tamrakar, Knut Alfredsén	Satellite-Based Precipitation Estimation for Hydropower Development	Hydro Nepal: Journal of Water, Energy and Environment	52-58	Volume 12, 2013	1998-5452 (1)
4.8.25 2013	Christine Weber, Christer Nilsson, Lovisa Lind, Knut Alfredsén, Lina E Polvi	Winter Disturbances and Riverine Fish in Temperate and Cold Regions	BioScience	199-210	Volume 63(3), 2013	0006-3568 (1) DOI: 10.1525/bio.2013.63.3.8
4.8.26 2014	Solomon Bogale Gebre, Knut Alfredsén	Contemporary trends and future changes in freshwater ice conditions: inference from temperature indices	Hydrology Research	455-478	45(3): 2014	1998-9563 (1) DOI: 10.2166/nh.2013.213
4.8.32 2014	Solomon Bogale Gebre, Netra Timalisina, Knut Alfredsén	Some Aspects of Ice – Hydropower Interaction in a Changing Climate	Energies	1641-1655	7(3):2014	1996-1073 (1)
4.8.33 2014	Solomon Bogale Gebre, Thibault Boissy, Knut Alfredsén	Sensitivity to climate change of the thermal structure and ice cover regime of three hydropower reservoirs	Journal of Hydrology	208-227	Volume 510, 2014	0022-1694 (2)
4.8 2015	Netra Prasad Timalisina, Knut Alfredsén, Ånund Killingtveit	Impact of climate change on ice regime in a river regulated for hydropower	Canadian journal of civil engineering	634-644	Volume 42, 2015	0315-1468 (1)
4.8 2015	Solomon Bogale Gebre, Thibault Boissy, Knut Alfredsén	Sensitivity of lake ice regimes to climate change in the Nordic region	The Cryosphere Discussions	743-788	Volume 7(2), 2013	1994-0440 (0)
5.1.3 2012	Måns Nilsson, Tony Zamparutti, Jan Erik Petersen, Björn Nykvist, Peter Rudberg, Jennifer McGuinn	Understanding policy coherence: analytical framework and examples of sector-environment policy interactions in the EU	Environmental Policy and Governance	395-423	22 (2012)	1756-932X (1) DOI: 10.1002/eet.1589
5.3.4 2012	Tor Haakon Bakken, Håkon Sundt, Audun Ruud, Atle Harby	Development of small versus large hydropower in Norway – comparison of environmental impacts	Energy Procedia	185-199	Volume 20, 2012	1876-6102 (1) DOI: 10.1016/j.egypro.2012.03.019
5.6.2 2016	Jonida Abazaj, Øystein Moen, Audun Ruud	Striking the Balance between Renewable Energy Generation and Water Status Protection: Hydropower in the context of the European Renewable Energy Directive and Water Framework Directive	Environmental Policy and Governance		2016	1756-932X (1) DOI: 10.1002/eet.1710
5.6.4 2013	Bernt Kristoffer Blindheim	Implementation of wind power in the Norwegian market; the reason why some of the best wind resources in Europe were not utilised by 2010	Energy Policy	337-346	Volume 58, 2013	0301-4215 (1) DOI: 10.1016/j.enpol.2013.03.033

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6.6.10 2014	Steinar Refsnaes, Niklas Magnusson, Torbjørn Ulleberg	Laboratory corrosion tests on overhead line conductors with bird protection systems	International Transactions on Electrical Energy Systems	1185-1191	Volume 24, Issue 8, August 2014	2050-7038 (1) DOI: 10.1002/etep.1770
6.7.2 2013	Oddmund Kleven, Deborah A. Dawson, Jan O. Gjershaug, Gavin J. Horsburgh, Karl-Otto Jacobsen, Petter Wabakken	Isolation, characterization and predicted genome locations of Eurasian eagle-owl (<i>Bubo bubo</i>) microsatellite loci	Conservation Genetics Resources	723-727	Volume 5(3), 2013	1877-7252 (1) DOI: 10.1007/s12686-013-9891-y
8.1.2 2015	Hogne Lerøy Sataøen, Ole Andreas Brekke, Susana Batel, Martin Albrechts	Towards a sustainable grid development? A comparison of British, Norwegian, and Swedish grid development	Energy Research & Social Science	178-187	Volume 9, September 2015	2214-6296 (2) DOI: 10.1016/j.erss.2015.08.011
8.1.5 2013	Susana Batel, Patrick Devine-Wright, Torvald Tangeland	Social acceptance of low carbon energy and associated infrastructures: A critical discussion	Energy Policy	1-5	Volume 58, July 2013	0301-4215 (1) DOI: 10.1016/j.enpol.2013.03.018
8.2.5 2014	Susana Batel, Patrick Devine-Wright	Towards a better understanding of people's responses to renewable energy technologies: Insights from Social Representations Theory	Public Understanding of Science	311-325	24(3), 2015	0963-6625 (1) DOI: 10.1177/0963662513514165
8.2.6 2013	Patrick Devine-Wright, Susana Batel	Explaining public preferences for high voltage pylon designs: An empirical study of perceived fit in a rural landscape	Land Use Policy	640-649	Volume 31, March 2013	0264-8377 (1) DOI: 10.1016/j.landusepol.2012.09.011
8.2.8 2014	Øystein Aas, Patrick Devine-Wright, Torvald Tangeland, Susana Batel	Public beliefs about high-voltage powerlines in Norway, Sweden and the United Kingdom: A comparative survey	Energy Research & Social Science	30-37	Volume 2, June 2014	2214-6296 (2) DOI: 10.1016/j.erss.2014.04.012
8.3.4 2014	Wenche Tobiasson, Tooraj Jamasb	Sustainable Electricity Grid Development and the Public: An Economic Approach	EPRG Working Paper 1411		Aug 2014	Working paper at Faculty of Economics, and Electricity Policy research Group, University of Cambridge working paper series
8.3.5 2014	Rahmatallah Poudineh, Tooraj Jamasb	Investment and Efficiency under Incentive Regulation: The Case of the Norwegian Electricity Distribution Networks	EPRG Working Paper 1306		April 2013	Working paper at Faculty of Economics, and Electricity Policy research Group, University of Cambridge working paper series
8.3.6 2014	Rahmatallah Poudineh, Tooraj Jamasb	Determinants of Investment under Incentive Regulation: The Case of the Norwegian Electricity Distribution Networks	EPRG Working Paper 1312		June 2013	Working paper at Faculty of Economics, and Electricity Policy research Group, University of Cambridge working paper series
8.3.7 2014	Rahmatallah Poudineh, Grigorios Emvalomatis, Tooraj Jamasb	Dynamic Efficiency and Incentive Regulation: An Application to Electricity Distribution Networks	EPRG Working Paper 1402		Feb 2014	Working paper at Faculty of Economics, and Electricity Policy research Group, University of Cambridge working paper series
8.3.8 2014	Rahmatallah Poudineh, Tooraj Jamasb	Distributed Generation, Storage, Demand Response, and Energy Efficiency as Alternatives to Grid Capacity Enhancement	EPRG Working Paper 1331		Nov 2013	Working paper at Faculty of Economics, and Electricity Policy research Group, University of Cambridge working paper series
8.3.9 2014	Luis Orea, Christian Growitsch, Tooraj Jamasb	Using Supervised Environmental Composites in Production and Efficiency Analysis: An Application to Norwegian Electricity Networks	EWI Working Paper 12/18		Dec 2012	

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8.3.13 2014	Rahmatallah Poudineh, Tooraj Jamasb	Distributed generation, storage, demand response and energy efficiency as alternatives to grid capacity enhancement	Energy Policy	222-231	Volume 67, April 2014	0301-4215 (1) DOI: 10.1016/j.enpol.2013.11.073
8.3 2014	Rahmatallah Poudineh, Tooraj Jamasb	Distributed Generation, Storage, Demand Response, and Energy Efficiency as Alternatives to Grid Capacity Enhancement	Energy Policy	222-231	Volume 67, April 2014	0301-4215 (1) DOI: 10.1016/j.enpol.2013.11.073
8.3	Luis Orea, Christian Growitsch, Tooraj Jamasb	Using Supervised Environmental Composites in Production and Efficiency Analyses: An Application to Norwegian Electricity Networks	Competition and Regulation in Network Industries	256-283	Volume 16, No. 3, 2015	1783-5917 (1)
8.3 2015	Rahmatallah Poudineh, Tooraj Jamasb	A New Perspective: Investment and Efficiency under Incentive Regulation	Energy Journal	241-263	Volume 36, Issue 4, October 2015	0195-6574 (2) DOI: 10.5547/01956574.37.1.rpou
8.3 2016	Rahmatallah Poudineh, Tooraj Jamasb	Determinants of investment under incentive regulation: The case of the Norwegian electricity distribution networks	Energy Economics	193-202	Volume 53, January 2016	0140-9883 (1) DOI: 10.1016/j.eneco.2014.08.021
8.3 2016	Wenche Tobiasson, C. Beestermöller, Tooraj Jamasb	Public engagement in electricity network development: The case of the Beaulieu-Denny project in Scotland	Economia e Politica Industriale (Journal of Industrial and Business Economics)	105-126	Volume 43, Issue 2, June 2016	DOI: 10.1007/s40812-016-0030-0
8.5.8 2014	Susana Batel, Patrick Devine-Wright, Line Camilla Wold, Helene Egeland, Gerd Jacobsen, Øystein Aas	The role of (de-)essentialisation within siting conflicts: An interdisciplinary approach	Journal of Environmental Psychology	149-159	Volume 44, December 2015	0272-4944 (2) DOI: 10.1016/j.jenvp.2015.10.004
8.5.9 2015	Jørgen K. Knudsen, Line Camilla Wold, Øystein Aas, Jens Jacob Kielland Haug, Susana Batel, Patrick Devine-Wright, Marte Qvenild, Gerd B. Jacobsen	Local perceptions of opportunities for engagement and procedural justice in electricity transmission grid projects in Norway and the UK	Land Use Policy	299-308	Volume 48, November 2015	0264-8377 (1) DOI: 10.1016/j.landusepol.2015.04.031
8	Etienne Bailey, Patrick Devine-Wright, Susana Batel	Understanding Responses To A UK High-Voltage Powerline Proposal: The Role Of Place And Project-Based Social Representations		2.1-2.23	Volume 25, Issue 1, 2016	
8 2016	Øystein Aas, Marte Qvenild, Line Camilla Wold, Gerd Blindheim Jacobsen, Audun Ruud	Local opposition against high-voltage grids: public responses to agency-caused science-policy trolls	Journal of Environmental Policy and Planning		2016	1523-908X (1) DOI: 10.1080/1523908X.2016.1213625
8	Jørgen K. Knudsen, Helene Egeland, Gerd Blindheim Jacobsen, Audun Ruud	Norsk vannkraft og "den doble miljøutfordringen"	Kart og plan	345-354	Vol. 73, nr. 5, 2013	0047-3278 (1)
10.2.4 2016	Ingeborg Graabak, Magnus Korpås	Balancing of variable wind and solar production in Continental Europe with Nordic hydropower – A review of simulation studies	Energy Procedia	91-99	Volume 87, 2016	1876-6102 (1) DOI: 10.1016/j.egypro.2015.12.362
10.2.5 2016	Ingeborg Graabak, Magnus Korpås	Variability characteristics of European wind and solar power resources – a review	Energies	449-	Volume 9(6), 2016	1996-1073 (1) DOI: 10.3390/en9060449
10.2.6 2016	Nicola Destro, Magnus Korpås, Julian Friedrich Sauterleute	Smoothing of Offshore Wind Power Variations with Norwegian Pumped Hydro: Case Study	Energy Procedia	61-68	Volume 87, 2016	1876-6102 (1) DOI: 10.1016/j.egypro.2015.12.358
10.3.3 2016	Ove Wolfgang, Arild Lote Henden, Michael Martin Belsnes, Christoph Baumann, Andreas Maaz, Andreas Schäfer, Albert Moser, Michaela Harasta, Trygve Døble	Scheduling when reservoirs are batteries for wind- and solar-power	Energy Procedia	173-180	Volume 87, January 2016	1876-6102 (1) DOI: 10.1016/j.egypro.2015.12.348

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10.3.5 2016	Andreas Maaz, Christoph Baumann, Albert Moser, Ove Wolfgang, Arild Lote Henden, Michael Belsnes, Michaela Harasta	Value of Additional Norwegian Hydropower to the European Electricity System			2016	13 th International Conference on the European Energy Market - EEM 2016; 2016 ISBN 978-1-5090-1298-5
10.3.6 2016	Stefan Jaehnert, Magnus Korpås	Assessing the economic impacts for outages of HVDC-cables connecting the Nordic area and continental Europe			2016	13 th International Conference on the European Energy Market - EEM 2016; 2016
10.4.3 2016	Antti Eloranta, Ingeborg Palm Helland, Odd Terje Sandlund, Trygve H. Hesthagen, Ola Ugedal, Anders Gravbrøt Finstad	Community structure influences species' abundance along environmental gradients	Journal of Animal Ecology	273-282	Volume 85, 2016	0021-8790 (2) DOI: 10.1111/1365-2656.12461
10.4.4 2015	Antti Eloranta, Kimmo K. Kahilainen, Per-Arne Amundsen, Rune Knudsen, Chris Harrod, Roger I. Jones	Lake size and fish diversity determine resource use and trophic position of a top predator in high-latitude lakes	Ecology and Evolution	1664-1675	Volume 5.(8), 2015	2045-7758 (1)
10.4.5 2016	Antti Eloranta, Javier Sanchez-Hernandez, Per-Arne Amundsen, Sigrid Østrem Skoglund, Jaclyn Brush, Eirik Haugstvedt Henriksen, Michael Power	Water level regulation affects niche use of a lake top predator, Arctic charr (<i>Salvelinus alpinus</i>)	Ecohydrology		2016	1936-0584 (1) DOI: 10.1002/eco.1766
10.4.6 2016	Odd Terje Sandlund, Antti Eloranta, Reidar Borgstrøm, Trygve H. Hesthagen, Stein Ivar Johnsen, Jon Museth, Sigurd Rognerud	The trophic niche of Arctic charr in large southern Scandinavian lakes is determined by fish community and lake morphometry	Hydrobiologia	117-130	Volume 783, February 2016	0018-8158 (1) DOI: 10.1007/s10750-016-2646-5
10.4.9 2017	Philipp E. Hirsch, Antti P. Eloranta, Per-Arne Amundsen, Åge Brabrand, Julie Charmasson, Ingeborg P. Helland, Michael Power, Javier Sanchez-Hernandez, Odd Terje Sandlund, Julian F. Sauterleute, Sigrid Skoglund, Ola Ugedal, Hong Yang	Effects of water level regulation in alpine hydropower reservoirs: an ecosystem perspective with a special emphasis on fish	Hydrobiologia		2017	DOI: 10.1007/s10750-017-3105-7
10.4.10 2017	Javier Sanchez-Hernandez, Antti Eloranta, Anders Finstad, Per-Arne Amundsen	Community structure affects trophic ontogeny in a predatory fish	Ecology and Evolution	358-367	Volume 7, Issue 1, January 2017	2045-7758 (1) DOI: 10.1002/ece3.2600
12.2.1 2013	Ingunn Saur Modahl, Hanne Lerche Raadal, Luc Gagnon, Tor Haakon Bakken	How methodological issues affect the energy indicator results for different electricity generation technologies	Energy Policy	283-299	Volume 63, 2013	0301-4215 (1) DOI: 10.1016/j.enpol.2013.09.005
12.2.4 2016	Tor Haakon Bakken, Ingunn Saur Modahl, Kolbjørn Engeland, Hanne Lerche Raadal, Silje Arnøy	The life-cycle water footprint of two hydropower projects in Norway	Journal of Cleaner Production	241-250	Volume 113, Feb. 2016	0959-6526 (2) DOI: 10.1016/j.jclepro.2015.12.036
12.3.7 2013	Tor Haakon Bakken, Ånund Killingtveit, Kolbjørn Engeland, Knut Alfredsen, Atle Harby	Water consumption from hydropower plants – review of published estimates and an assessment of the concept	Hydrology and Earth System Sciences	3983-4000	Volume 17, 2013	1027-5606 (1) DOI: 10.5194/hessd-10-8071-2013 DOI: 10.5194/hess-17-3983-2013
12.3.8 2013	Tor Haakon Bakken, Ånund Killingtveit, Kolbjørn Engeland, Knut Alfredsen, Atle Harby	Water consumption from hydropower production: review of published estimates	Considering Hydrological Change in Reservoir Planning and Management	155-160	July 2013	IAHS-IAPSO-IASPEI Assembly; Gothenburg, Sweden; (IAHS Publ., 2013)

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12.3.10 2015	Tor Haakon Bakken, Fredrikke Johnsen, Ånund Killingtveit, Knut Alfredsén	Are Reservoirs Water Consumers or Water Collectors? Reflections on the Water Footprint Concept Applied on Reservoirs	Water Resources Management	4919-4926	Vol. 29, Issue 4, 2015	0920-4741 (1) DOI: 10.1007/s11269-015-1104-x
12.3.20 2016	Tor Haakon Bakken, Christian Almestad, Jørgen Rugelbak, M. Escobar, S. Micko, Knut Alfredsén	Climate change and increased irrigation demands: What is left for hydropower generation? Results from two semi-arid basins	Energies	191-	Volume 9(3), 2016	1996-1073 (1) DOI: 10.3390/en9030191
12.3. 2016	Tor Haakon Bakken, Ingunn Saur Modahl, Hanne Lerche Raadal, Ana Adeva Bustos, Silje Arnøy	Allocation of water consumption in multipurpose reservoirs	Water Policy	932-947	Volume 18.(4), 2016	1366-7017 (1) DOI: 10.2166/wp.2016.009
12.4.6	David Barton, Henrik Lindhjem	Naturens flomdemping – hva er den økonomiske verdien av økosystem-tjenester fra et nedbørfelt?	Samfunnsøkonomen	44-54	4 – 2013	1890-5250 (1)
12.4.15 2017	Ana Adeva Bustos, Richard Hedger, Hans-Petter Fjeldstad, Knut Alfredsén, Håkon Sundt, David Barton	Modelling the effects of alternative mitigation measures on Atlantic salmon production in a regulated river	Water Resources and Economics, Special Issue on Economics of River Restoration		2017	2212-4284 (1) 10.1016/j.wre.2017.02.003
12.4.17 2015	Narayan Hari Rijal, Knut Alfredsén	Environmental Flows in Nepal – An Evaluation of Current Practices and an Analysis of the Upper Trishuli-I Hydroelectric Project	Hydro Nepal: Journal of Water, Energy and Environment	8-17	Volume 17, July 2015	1998-5452 (1) DOI: 10.3126/hn.v17i0.13268
12.5.1 2014	Tor Haakon Bakken, Anne Gure Aase, Dagmar Hagen, Håkon Sundt, David Barton, Paivi Lujala	Demonstrating a new framework for the comparison of environmental impacts from small-scale hydropower, large hydropower and wind power projects	Journal of Environmental Management	93-101	Volume 140, 1 July 2014	0301-4797 (1) DOI: 10.1016/j.jenvman.2014.01.050
12.5.2 2016	Tor Haakon Bakken, Ingunn Saur Modahl, Hanne Lerche Raadal, Ana Adeva Bustos, Silje Arnøy	Allocation of water consumption in multipurpose reservoirs	Water Policy	932-947	18, 2016	1366-7017 (1) DOI: 10.2166/wp.2016.009
12 2016	David N. Barton, Tor Haakon Bakken, Anders L. Madsen	Using a Bayesian belief network to diagnose significant adverse effect of the EU Water Framework Directive on hydropower production in Norway	Journal of Applied Water Engineering and Research		2016	2324-9676 (1) DOI:10.1080/23249676.2016.1178081
12.5 2016	Erik Olav Gracey, Francesca Verones	Impacts from hydropower production on biodiversity in an ICA framework – review and recommendations	International Journal of Life Cycle Assessment	412-428	Volume 21, Issue 3, March 2016	1614-7502 (2)
13 2016	Susana Dias Amaral, Paulo Branco, Ana Teixeira da Silva, Christos Katopodis, Teresa Viseu, Maria Teresa Ferreira, António Nascimento Pinheiro, José Maria Santos	Upstream passage of potamodromous cyprinids over small weirs: the influence of key-hydraulic parameters	Journal of Ecohydraulics		2016	2470-5365
13.3 2016	Casper van Leeuwen, Jon Museth, Odd Terje Sandlund, Tore Qvenild, Leif Asbjørn Vøllestad	Mismatch between fishway operation and timing of fish movements: A risk for cascading effects in partial migration systems	Ecology and Evolution	2414-2425	Volume 6.(8) 2016	
13 2016	Martin A.Wilkes, Andrew J. Neverman, Roser Casas-Mulet, Ana Adeva-Bustos, Alexander H. McCluskey, Valerie Ouellet, Davide Vanzo, Paul A. Franklin, Ana Margarida Ferreira T. da Silva	Early careers on ecohydraulics: challenges, opportunities and future directions	Journal of Ecohydraulics		2016	2470-5365

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14 2015	Audun Ruud, Hans-Petter Fjeldstad	Vannforskriften og norsk vannkraftproduksjon. Kan miljødesign og funksjonsmål gi bedre planprosesser?	VANN	152-162	Volume 50(02), 2015	0042-2592 (1)

Articles published in anthologies

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3.4.9 2012	Peggy Zinke	Application of a porous media approach for vegetation flow resistance	River Flow 2012	Munillo	301-308	Vol. 1, 2012	978-0-415-62129-8	Taylor & Francis Group	
5.1.6 2011	Audun Ruud, Helene Egeland, Gerd B. Jacobsen, Jørgen Knudsen, William M. Lafferty	Channelling Norwegian hydropower towards greener currents: The challenge of conflicting environmental concerns?	World Renewable Energy Congress 2011; Linköping; 8-13 May 2011			Volume 57, 2011			
5.1.7 2011	Peter M. Rudberg, Måns Nilsson	Reducing our emissions while achieving good status of our water bodies – is it possible? Swedish hydropower in the limelight	World Renewable Energy Congress 2011; Linköping; 8-13 May 2011		2690-2696	2011			

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0.1 2012	Dan Arvizu, Thomas Bruckner, Helena Chum, Ottmar Edenhofer, Segen F. Estefen, André Faaij, Manfred Fischedick, Gerrit Hansen, Gerardo Hiriart, Olav Hohmeyer, Terry K.G. Hollands, John Huckerby, Susanne Kadner, Ånund Killingtveit, Arun Kumar, Anthony Lewis, Oswaldo Lucon, Patrick Matschoss, Lourdes Maurice, Monirul Mirza, Cathrine Mitchell, William Moomaw, José Moreira, Lars J. Nilsson, John Nyboer, Ramon Pichs-Madruga, Jayant Sathaye, Janet L. Sawin, Roberto Schaeffer, Tormod A. Schei, Steffen Schlömer, Kristin Seyboth, Ralph Sims, Graham E. Sinden, Youba Sokona, Christoph von Stechow, Jan Steckel, Aviel Verbruggen, Ryan Wiser, Francis Yamba, Timm Zwickel	Technical Summary Renewable Energy Sources and Climate Change Mitigation Special Report of the Intergovernmental Panel on Climate Change	p. 27-158, 2012	978-1-107-60710-1	Cambridge University Press	Cambridge
0.1 2012	Arun Kumar, Tormod A. Schei, Alfred Ahenkorah, Rodolfo Caceres Rodriguez, Jean-Michel Devernay, Marcos Freitas, Douglas Hall, Ånund Killingtveit, Zhiyu Liu	Hydropower Renewable Energy Sources and Climate Change Mitigation Special Report of the Intergovernmental Panel on Climate Change	p. 437-496, 2012	978-1-107-60710-1	Cambridge University Press	Cambridge
0.1 2012	Thomas Bruckner, Helena Chum, Arnulf Jäger-Waldau, Ånund Killingtveit, Luis Gutierrez-Negrin, John Nyboer, Walter Musial, Aviel Verbruggen, Ryan Wiser	Recent Renewable Energy Cost and Performance Parameters Renewable Energy Sources and Climate Change Mitigation Special Report of the Intergovernmental Panel on Climate Change	p. 1001-1022, 2012	978-1-107-60710-1	Cambridge University Press	Cambridge
0.1.41-1 2013	Ånund Killingtveit	Balansekraft og pumpekraftverk (Innspill til NTVA's En nasjonal energistrategi 2013–2017, 978-82-7719-079-4)	2013			
0.1.41-2 2013	Atle Harby	Miljøvirkning og miljødesign (Innspill til NTVA's En nasjonal energistrategi 2013–2017, 978-82-7719-079-4)	2013			
0.1.13 2012	Julian Sauterleute, Eva Skarbøvik, Tor Haakon Bakken, Helene Egeland, Atle Harby, Per Stålnacke, Nagothu Udaya Sekhar, K. Palanisami, K. Krishna Reddy, K. Gosain	Application of the Building Block Methodology to the Sri Ram Sagar Project – Report of the workshop held in Hyderabad, India, September 2011	TR A7181, 2012	978-82-594-3509-5	SINTEF Energi AS	Trondheim
0.1.37 2012	Atle Harby, Frederick Guerin, Julie Bastien, Maud Demarty	Greenhouse gas status of hydro reservoirs	2012		CEDREN	Trondheim
0.1.38 2012	Roel May, Kjetil Bevanger, Jiska van Dijk, Zlatko Petrin, Hege Brende	Renewable energy respecting nature. A synthesis of knowledge on environmental impacts of renewable energy	NINA Report 874, 2012	978-82-426-2469-7	NINA	Trondheim
0.1.39 2012	Atle Harby	Environmental impacts of Adjariatsqali hydro-power development – Preliminary comments	2012		CEDREN	Trondheim
0.4.1 2011	Audun Ruud, Jens Jacob Kielland Haug, William M. Lafferty	"Case Hardanger" – En analyse av den formelle konsesjonsprosessen og mediedekningen knyttet til den omsøkte luftledningen Sima-Samnanger	TR A7093, 2011	978-82-594-3473-9	SINTEF Energi AS	Trondheim

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0.4.6 2014	Audun Ruud	Hva blir miljøtiltakene i Sira-Kvina vannområde? Noen refleksjoner rundt pågående prosesser knyttet til vannkraftproduksjon i lys av arbeidet med vannforskriften	TR A7427, 2014	978-82-594-3596-5	SINTEF Energi AS	Trondheim
0.4.9 2015	Stefan Jaehnert, Hossein Farahmand	Southern Norway as a HVDC hub – Transmission grid capability and necessary expansions	2015		CEDREN	Trondheim
1 2016	Kjetil Bevanger, Roel May, Bård Stokke	Landbasert vindkraft. utfordringer for fugl, flaggermus og rein	Temahefte 66, 2016	978-82-426-2958-6	NINA	Trondheim
1.0.2 2010	Kjetil Bevanger, Finn Berntsen, Stig Clausen, Espen Lie Dahl, Øystein Flagstad, Arne Follestad, Duncan Halley, Frank Hanssen, Pernille Lund-Hoel, Lars Johnsen, Pål Kvaløy, Roel May, Torgeir Nygård, Hans Christian Pedersen, Ole Reitan, Yngve Steinheim, Roald Vang	Pre- and post-construction studies of conflicts between birds and wind turbines in coastal Norway (BirdWind) – Progress Report 2009	NINA Report 505, 2009	978-82-426-2077-4	NINA	Trondheim
1.0.4 2011	Kjetil Bevanger, Finn Berntsen, Stig Clausen, Espen Lie Dahl, Øystein Flagstad, Arne Follestad, Duncan Halley, Frank Hanssen, Lars Johnsen, Pål Kvaløy, Pernille Lund-Hoel, Roel May, Torgeir Nygård, Hans Christian Pedersen, Ole Reitan, Eivin Røskoft, Yngve Steinheim, Bård Gunnar Stokke, Roald Vang	Pre- and post-construction studies of conflicts between birds and wind turbines in coastal Norway (Bird-Wind) – Report on findings 2007-2010	NINA Report 620, 2010	978-82-426-2198-6	NINA	Trondheim
2014	Atle Harby, Tor Haakon Bakken, Lars Erikstad, Dagmar Hagen, Ånund Killingveit, Audun Ruud	Sammenligning av miljøkonsekvenser av stor og liten vannkraft	2014		CEDREN	Trondheim
1.0.5 2011	Roel May, Kjetil Bevanger	Proceedings. Conference on Wind energy and Wildlife impacts, 2-5 May 2011, Trondheim, Norway	NINA Report 693, 2011	978-82-426-2278-5	NINA	Trondheim
1.0.9 2012	Roel May	Strategisk konsekvensutredning for landbasert vindkraft. En evaluering av regionale planer for vindkraft	NINA Report 746, 2011	978-82-426-2335-5	NINA	Trondheim
1.1.8 2012	Ole Reitan	Søk etter døde fugler i Smøla vindpark 2011 – årsrapport	NINA Report 790, 2012	978-82-426-2385-0	NINA	Trondheim
1.1.9 2013	Ole Reitan	Søk etter døde fugler i Smøla vindpark 2012 – årsrapport	NINA Report 925, 2013	978-82-426-2529-8	NINA	Trondheim
1 2011	Roel May, Espen Lie Dahl, Arne Follestad, Ole Reitan, Kjetil Bevanger	Samlet belastning av vindkraftutbygging på fugl – standardvilkår for for- og etterundersøkelser	NINA Report 623, 2010	978-82-426-2201-3	NINA	Trondheim
1 2011	Roel May, Torgeir Nygård, Espen Lie Dahl, Ole Reitan, Kjetil Bevanger	Collision risk in white-tailed eagles. Modelling kernel-based collision risk using satellite telemetry data in Smøla wind-power plant	NINA Report 692, 2011	978-82-426-2277-8	NINA	Trondheim
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1.9.2 2012	Signe Christensen-Dalsgaard, Svein-Håkon Lorentsen, Frank Hanssen, Geir Helge Systad	Offshore vindenergianlegg og sjøfugl – Oppdatert screening av potensielle konfliktområder på nasjonal skala	NINA Report 616, 2011	978-82-426-2194-8	NINA	Trondheim

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1.9.3 2012	Svein-Håkon Lorentsen (red), Signe Christensen-Dalsgaard, Arne Follestad, M. Langset, Roel May, Espen Lie Dahl, Ø. Hamre	Fagrapport til strategisk konsekvensutredning av fornybar energiproduksjon til havs – sjøfugl	NINA Report 825, 2012		NINA	Trondheim
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2.3.6	Torbjørn Forseth, Atle Harby (red.)	Handbook for environmental design in regulated salmon rivers	NINA Temahefte 53, 2014	978-82-426- 2638-7	NINA	Trondheim
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2.5.2 2010	Tor Haakon Bakken, Julie Charmasson, Atle Harby	Vurdering av vanntemperatur i Aurlandsvassdraget i perioden 2004 – 2006	TR A7008, 2010	978-82-594- 3447-0	SINTEF Energi AS	Trondheim
2.5.3 2011	Tor Haakon Bakken, Julie Charmasson, Atle Harby	Vurderinger av vanntemperatur i Aurlandsvassdraget i perioden 2004 – 2006 og 2010	TR A7077, 2011	978-82-594- 3471-5	SINTEF Energi AS	Trondheim
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3.0 2016	Tor Haakon Bakken, Torbjørn Forseth, Atle Harby (red.)	Miljøvirkninger av effektivisering: Kunnskapsstatus og råd til forvaltning og industri	Temahefte 62, 2016	978-82-426- 2834-3	NINA	Trondheim
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4.1.4 2011	Maria Daniela Catrinu, Jørgen Kjetil Knudsen, Eivind Solvang	Perspectives on hydropower's role to balance non-regulated renewable power production in Northern Europe. Report on the CEDREN workshop, Düsseldorf, 15-16 December 2010	TR A7107, 2011	978-82-594-3486-9	SINTEF Energi AS	Trondheim
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6.0.2 2010	Kjetil Bevanger, Gundula Bartzke, Henrik Brøseth, Jan Ove Gjershaug, Frank Hanssen, Karl-Otto Jacobsen, Pål Kvaløy, Roel May, Torgeir Nygård, Hans Christian Pedersen, Ole Reitan, Steinar Refsnæs, Sigbjørn Stokke, Roald Vang	Optimal design and routing of power lines; ecological, technical and economic perspectives (OPTIPOL) – Progress Report 2009	NINA Report 504, 2009	978-82-426-2076-7	NINA	Trondheim
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6.0.8 2013	Kjetil Bevanger, Gundula Bartzke, Henrik Brøseth, Espen Lie Dahl, Jan Ove Gjershaug, Frank Hanssen, Karl-Otto Jacobsen, Oddmund Kleven, Pål Kvaløy, Roel May, Roger Meås, Torgeir Nygård, Steinar Refsnæs, Sigbjørn Stokke, Jørn Thomassen	Optimal design and routing of power lines; ecological, technical and economic perspectives (OPTIPOL) – Progress Report 2012	NINA Report 904, 2012	978-82-426-2507-6	NINA	Trondheim
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6.3.5 2013	Jørn Thomassen, Frank Hanssen, Roel May, Kjetil Bevanger	OPTIPOL Least Cost Path dialog 2 – Rapport fra dialogseminar 2 – kriterier og kriterieverdier i OPTIPOL-LCP versjon 1.0	NINA Report 907, 2013	978-82-426-2511-3	NINA	Trondheim
6.4.1 2013	Kjetil Bevanger, Steinar Refsnæs	Kamouflering av kraftledninger – Evaluerer av økologiske og tekniske implikasjoner	NINA Report 878, 2013	978-82-426-2474-1	NINA	Trondheim

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8	R. Poudineh, Wenche Tobiasson, Tooraj Jamasb	Electricity Distribution Utilities and the Future: More than Wires (Routledge Companion to Network Industries, pp.297-311)	2016		Routledge	
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12.6.2 2013	Maria Catrinu-Renström, David Barton, Tor Haakon Bakken, Mika Marttunen, Andrea Mammoliti Mochet, Roel May, Frank Hanssen	Multi-criteria analysis applied to environmental impacts of hydropower and water resources regulation projects	TR A7339, 2013	978-82-594-3566-8	SINTEF Energi AS	Trondheim
12 2015	World Energy Council, incl. Tor Haakon Bakken	World Energy Resources – Charting the Upsurge in Hydropower Development	2015		World Energy Council	
12	Tor Haakon Bakken	Operational water losses Skjerka regulation	2016		CEDREN	Trondheim
13.0.2 2014	Karl Øystein Gjelland, Henrik Baktøft, Finn Økland, Richard Hedger, Torbjørn Forseth	Automatisk posisjonering av akustisk merket smolt i tre dimensjoner – Utprøving og evaluering i Mandalsvassdraget	NINA 1072, 2014	978-82-426-2690-5	NINA	Trondheim
14.2.1 2016	Peggy Zinke	Overview of existing studies and concepts and suggestion of relevant biophysical indicators	Project memo		NTNU	Trondheim
14.6.2 2016	Peggy Zinke	Methods for hydro-morphological classification and characterization of rivers. Overview of the German and Swiss methods.	Project memo		NTNU	Trondheim
14.6.3 2016	Peggy Zinke	Test av den svenske elveklassifiseringsmetoden. Kort beskrivelse av metoden og foreløpige resultater for Gudbrandsdalslågen.	Project memo		NTNU	Trondheim
14.6.4 2016	Peggy Zinke	Test av den svenske elveklassifiseringsmetoden. Foreløpige resultater for Surna.	Project memo		NTNU	Trondheim

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