Hydro Summit – Trondheim 5th- 6th **February 2020** Program for Breakout Session 3, Environmental Conditions

Hydropower Workshop Day 1 – Breakout session						
Location Room Watzinger, NTNU Campus Date February 6 th 20						
Challenges and innovations for improving environmental conditions in hydropower rivers						
Time	Title	Speaker				
12.30	Environmental design of hydropower. New developments and examples	Line Sundt-Hansen, NINA				
12.45	Hydropower and River Ecology - Current Markus Aufleger, developments in fish protection University of Innsbruck					
13.00	Monitoring and handling of over-saturated gas downstream of power plants case studies from the Columbia River	Dana McCoskey & Daniel Deng, Pacific Northwest National Laboratory				
13.15	Mitigating impacts on fish from super-saturation caused by hydropower	Sebastian Stranzl, NORCE				
13.30	Discussion					
14.15	Coffee break					
Two-way safe fish migration and innovative methods						
Time	Title	Speaker				
14.45	Fish Passage Technology R&D and Standard Modular Hydropower	Dana McCoskey, US Department of Energy				
15.00	"The hundred-year war" between hydropower and fish migration is history! What do we know and what can we do?	Ana Silva, NINA				
15.15	The Vortex Power Plant	Torsten Heyer, University of Dresden				
15.30	From remote sensing to modelling impacts of hydropower. Innovative techniques & applications	Knut Alfredsen, NTNU				
15.45	Discussion					
16.30	Demonstration of FIThydro wiki	Bendik Hansen, SINTEF				
17.00	End of workshop day 1					
Hydropower Workshop Day 2 – Breakout session						
Locatio	<u> </u>	Date February 6 th 2020				
Mitigation measures for improved environmental conditions and increased power production						
Time	Title	Speaker				
09.00	Overview and examples of mitigation measures implemented by Statkraft	Tone Knudsen, Statkraft				
09.15	Potentials in a large-scale hydro power river	Johanna Normark, Skellefteå kraft				
09.30	Overview and examples of mitigation measures implemented by Vattenfall	David Aldvén, Vattenfall				
09.45	Environmental Benefits from Flow Management & Power System Trade-offs	Brenda Pracheil, Oak Ridge National Laboratory				
10.00	Coffee break					
10.30	Mitigation measures in Sweden	Johan Kling, Swedish Agency for Marine and Water management				
10.45	Cost-effective mitigation measures	Ana Adeva Bustos, SINTEF				
11.00	Discussion and wrap-up					
12.00	Lunch and closing of workshop (Room: C201) Plenary session with lunch and takeaways from each	ı session				
13:00	Closing of workshop					
	•					