

# SusWater brukermøte 5/12 2017

10:00 Velkommen og status for SusWater

10:30 Faglige funn

**11:30 Lunsj**

12:30 Faglige funn fortsetter

13:00 Hva kan SusWater levere? Håndbok - sluttprodukter

- Karakterisering av vassdrag
- Bruk av indikatorer
- Kartlegging av brukerinteresser
- Verdivurderinger og nytte-kostanalyser
- Beslutningsstøtte for tiltaksanalyser
- Flaskehals i dagens forvaltningspraksis
- Økt samfunnsaksept

14:30 Drøfting av konkret innhold og leveranser i 2018.

15.30 Veien videre og kobling mot andre prosjekter

**16:00 Slutt**

# Hva står det i den opprinnelige prosjektbeskrivelsen?

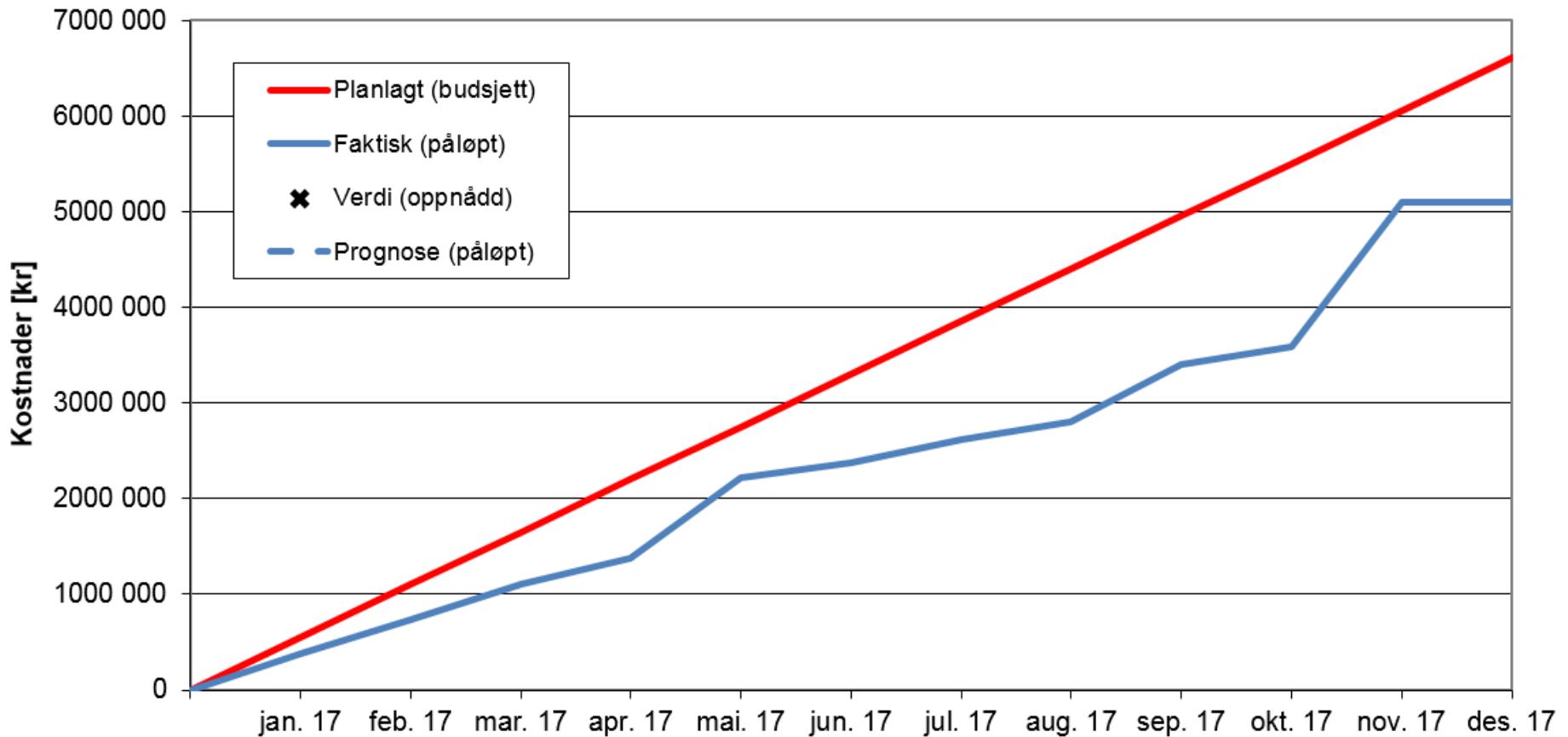
The overall objective of SusWater is to formulate and implement more comprehensive watershed management schemes in times when new environmental objectives are formulated and new social and political expectations are created towards river basins subject to hydromorphological alterations. This is mostly related to the national implementation of the EU Water Framework Directive and the consequences for hydropower production that currently are subject to reconsiderations of environmental conditions and requirements within existing licenses as well as new or revised licenses.

# Dagens prosjektstruktur med tilknyttede spørsmål for de enkelte WPs

- WP 1: Hva er de regulatoriske utfordringene knyttet til styrket vannforvaltning i vassdrag med kraftproduksjon?
- WP 2: Hvor mye vann er nok for å oppfylle spesifikke miljømål?
- WP 3: Hvordan kan ulike sosioøkonomiske fordeler og kostnader bedre måles og operasjonaliseres?
- WP 4: Kan vi formulere et rammeverk for mer helhetlige beslutningsprosesser gjennom multikriterieanalyser?
- WP 6: Hvordan kan vi karakterisere hydrologiske og morfologiske endringer i elver med vannkraftproduksjon?

**WP 5: Hvordan kan vi skape en bedre og mer dynamisk vannforvaltning i regulerte elver med kraftproduksjon?**

# Økonomisk status



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502000131-14 SusWater		Budsjett	Påløpt	SINTEF	NINA	NTNU	UiO	NIVA	Uni	Others
		6 609 083	5 100 189	1 552 747	2 374 974	1 015 000	0	1 436 362	230 000	0
			77 %	86 %	69 %	93 %	#DIV/0!	65 %	107 %	#DIV/0!
Adm.	Administrasjon og møter	84 %	400 000	335 430	196 520	138 910	0	0	0	0
WP1	Regulatory framework	85 %	699 974	592 184	0	592 184	0	0	0	0
WP2	Techno-ecological method	67 %	319 205	214 740	214 740	0	0	0	0	0
WP3	Socio-economic indicators	66 %	1 136 362	755 051	0	0	0	755 051	0	0
WP4	Framework for decision support	79 %	950 000	750 057	0	750 057	0	0	0	0
WP5	Towards improved watershed governance	18 %	800 000	144 611	29 495	115 116	0	0	0	0
WP6	Hydromorphological characterization	100 %	1 000 000	1 004 575	532 217	48 740	0	0	178 618	245 000
'ost-do	Post-doc	100 %	940 000	940 000	0	0	940 000	0	0	0
SEI	Stockholm Environment Institute	100 %	363 542	363 542	363 542	0	0	0	0	0

No.	Title	Type	Due date	Status	Resp.
<b>WP0</b>	<b>Administration</b>				
14.0.1	Kick-off meeting	Meeting	2015	2015	SINTEF
14.0.2	Miljødesign og gode miljøtiltak i regulerte vassdrag: noen refleksjoner rundt pågående prosesser	Pres.		2015-09-01	SINTEF
14.0.3	User meeting	Meeting	2016-12-31	2016-11-10	NINA
14.0.4	User meeting Final project meeting	Meeting	2017-12-05	10%	NINA
	SusWater/CEDREN symposium	Meeting	2018-12-31		NINA
<b>WP1</b>	<b>Regulatory framework and policy implementation</b>				
14.1.1	Vannforskriften og norsk vannkraftproduksjon. Kan miljødesign og funksjonsmål gi bedre planprosesser?	Journal		2015	SINTEF
14.1.2	Challenges of Implementing the EU WFD in relation to Sustainable Hydropower in Sweden	Report	2016-10-31	95 %	SEI
14.1.3	Who's Hydropower? Reflections on the implementation of the WFD in Norway and Sweden	Journal	2016-12-31	2017-07-18	SEI
14.1.4	Blir det et kjempeløft for vannmiljø. Nøn refleksjoner etter godkjenning av norske vannforvaltningsplaner	Report	2017-28-02	2017-08-01	NINA

14.1.5	Blir det et kjempeløft for vannmiljø. Noen refleksjoner etter godkjenning av norske vannforvaltningsplaner	Policy brief	2017-03-31	2017-09-01	NINA
14.1.6	Status for vannforvaltning og vannkraft i Østerrike i lys av EUs Vanndirektiv	Memo	2017-12-31	2017-06-01	SEI
14.1.7	Who's Hydropower? Reflections on the implementation of the WFD in Norway and Sweden	Policy brief	2017-11-30		NINA
<b>WP2 Techno-ecological methods for sustainable river basin management</b>					
14.2.1	Overview of existing studies and concepts and suggestion of relevant biophysical indicators	Memo	2016-02-01	2016-12-08	NTNU, SINTEF
14.2.2	Discussion of eco-physical parameters with stakeholders during workshops and case-reference group meetings in cooperation with WP3	Workshop		2016-04-07, 2016-04-18, 2016-06-14, 2016-09-29	NTNU
14.2.3	Contributions to workshop and meetings on hydromorphological characterization	Pres.		2016-05-23, 2016-08-08	NTNU
14.2.4	Test and application of different methods for mapping and characterisation of Norwegian rivers	Journal	2017-12-31		NTNU
14.2.5	Journal-Artikkel om kobling av elvestrukturer og brukerinteresser (med SusWater WP3/4)	Journal	2017-12-01	In progress	NTNU

	Workshops and papers in cooperation with WP3 (as specified below in WP 3)		2017-10-31		NTNU, SINTEF, NIVA, NINA
	Bidrag til Journal-Artikkel om «parameter-packages for MCA» (under redaksjon av WP4)	Journal	2018-05-01		NINA
	WIKI e.l. (eller håndbok-kapittel) om elvetyper i Norge		2018-05-01		NTNU
<b>WP3</b>	<b>Socio-economic indicators for sustainable river basin management</b>				
14.3.1	Workshop organized in Hordaland with stakeholders from BKK, Vaksdal and Voss municipalities, and the county governor to discuss indicators to represent water use interests and the eco-physical parameters which characterize these interests.	Workshop	Spring 2016	2016-04-07	NIVA
14.3.2	Overview of suitable methods for benefit evaluation of water use interests by means of indicator evaluation	Report	Spring 2016	Postponed 4 Dec 2017	NIVA
14.3.3	Workshop organized in Agder with stakeholders from Sira-Kvina kraftselskap, Kvinesdal and Sirdal municipalities, and NVE regional, and Agder Coordinating Authority - to discuss indicators to represent water use interests and the eco-physical parameters which characterize these interests	Workshop		2016-04-18	NIVA

14.3.4	Case-referansegruppemøte i Agder for bl.a. å drøfte hvilke elvestrekninger som skal verdivurderes for relevant brukerinteresser (samarbeid med WP1, WP2 og WP4)	Milestone	Fall 2016	Juni 2016	NIVA
14.3.5	Case-referansegruppemøte i Hordaland for bl.a. å drøfte hvilke elvestrekninger som skal verdivurderes for relevante brukerinteresser (samarbeid med WP1, WP2 og WP4)	Milestone	Fall 2016	Sep 2016	NIVA
14.3.6	Workshops (two) with stakeholders in each case study area for the discussion of results from the evaluation of water use interests related defined criteria	Workshop	Fall 2017	Nov 2017	NIVA
14.3.7	A paper on the testing of different methods, non-monetary and monetary for the evaluation of socio-economic and socio-cultural water use values	Journal	2018-06-30	5 %	NIVA
14.3.8	Propose a checklist of indicators suitable for conditions in Norwegian river basins matching the Ecosystem Goods and Service Framework in the WFD context. The checklist will include references to relevant methods and criteria	Memo	2018-06-01		NIVA
	Workshop to Compare socio-economic impacts of measures across water use interests	Workshop	Spring 2018	Cancelled	
	Checklist of indicators reflecting user interests in Norwegian river basins considering both the	Journal	2018-12-31	30 %	NIVA

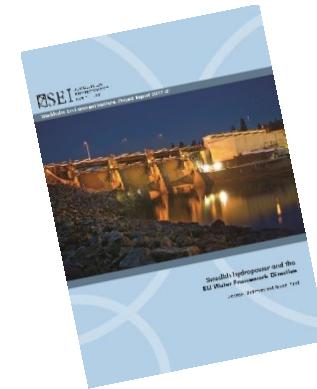
	Ecosystem Goods and Service Framework and the WFD context					
	Water use indicators and their evaluation in river basins in Norway	Journal	2018-12-31	Cancelled	NIVA,	
	Overview of suitable methods for benefit evaluation of water use interests by means of indicator evaluation	Policy brief	2018-03-31		NIVA	
<b>WP4 Framework for decision support</b>						
14.4.1	Hydropower concession revisions in Norway as multi-criteria decision problems (based on past revisions)	Memo	Summer 2016	Postponed 2017-12-31	NINA	
14.4.2	Public, hybrid and market-based approaches to achieving environmental objectives in regulated catchments - a critical evaluation for the future of Norways hydropower concession revision regime	Conference Paper	2016-11-30	Postponed 2018-05-31	NINA	
14.4.3	Hva kan vi lære fra gjennomførte revisjoner i Norge? Refleksjoner rundt innhold og prosesser	Policy Brief	2016-11-30	Nov 2017	NINA	
14.4.4	Hva kan vi lære fra gjennomførte revisjoner i Norge? Refleksjoner rundt innhold og prosesser	Journal	Fall 2017	2017-12-31	NINA	
14.4.5	Discussion of practice-oriented management recommendations for multi-criteria decision support with SusWater stakeholders	Workshop	Spring 2018		NINA	

<b>WP5</b>	<b>Towards improved watershed governance</b>				
14.5.1	Development of methods and procedures for improved watershed governance	Journal	2018-12-31		NINA
14.5.2	Status for WFD implementation concerning hydropower in Norway, Sweden and Austria	Report	2017-12-31	Cancelled	SEI
14.5.3	Status for WFD implementation concerning hydropower in Norway, Sweden and Austria	Policy brief	2017-12-31		NINA
14.5.3	Etablering av Referansegruppe for dialog rundt referanseguide og leveranser	Workshop	2017-09-30	Postponed	NINA
14.5.4	Hvordan skape mer helhetlige tilnæringer? Oppsummering og bearbeiding av funn fra arbeidspakkene. Forslag til en referanseguide for best praksis	??	2018-09-30		NINA
14.5.5	Towards improved watershed governance	Journal	2018-12-31	Cancelled	NINA
14.5.6	Final workshop – presenting research findings	Workshop	2018-10-31		NINA
<b>WP6</b>	<b>Improved characterization of water bodies impacted by hydropower</b>				
14.6.1	Workshop on morphological characterization	Workshop	2016-09-01	2016-09-09	SINTEF
14.6.2	Methods for hydro-morphological classification and characterization of rivers. Overview of the German and Swiss methods.	Memo	2016-12-01	2016-11-24	NTNU

No.	Title	Type	Due date	Status	Resp.
14.6.3	Test av den svenske elveklassifiseringsmetoden. Kort beskrivelse av metoden og foreløpige resultater for Gudbrandsdalslågen.	Memo	2016-12-01	2016-11-25	NTNU
14.6.4	Test av den svenske elveklassifiseringsmetoden. Foreløpige resultater for Surna. Workshop on remote sensing and links to hydromorphology	Memo Workshop	2016-12-01 2016-12-12	2016-11-25 Jan 2018	NTNU SINTEF
14.6.5	Guidance in how to use CEDREN EnviDORR and CEDREN EnviPEAK methods directly in classification of water bodies	Memo	2016-12-31	2017-02-28	SINTEF
14.6.6	Best practice handbook with methods to improve ecological status by restoring hydro-morphological characteristics of rivers	Report	2017-06-30	2017-06-30	Uni
14.6.7	Test av metoder for hydromorfologisk kartlegging i Lågen og Surna	Memo	2016-12-01	2017-01-31	SINTEF

14.6.8	Workshop on hydrology, hydrologic modelling and hydrologic variation and their ecologic relevance	Workshop	2016-12-13	Dec 2016	SINTEF
14.6.9	Methods for hydro-morphological classification and characterization of rivers	Report	2017-02-28	Postponed Nov 2017	SINTEF
14.6.10	Workshop together with environmental and water resources authorities in Norway and Sweden	Workshop	2017-04-30	Postponed	SINTEF
14.6.11	Methodological guidance to map, characterize and classify hydromorphology in rivers	Report	2017-06-30	Postponed Nov 2017	SINTEF
14.6.12	Test and evaluation of methods to characterize hydromorphological changes in rivers	Journal paper	2017-12-31		SINTEF

# Oppsummering leveranser



- Rapporter
  - Vannforvaltningsplaner i Norge – opp som en løve, ned som en skinnfell?
  - Tiltakshåndbok
  - Swedish hydropower and the Water Framework Directive
- Journal-artikkelen:
  - "Whose hydropower"
- Policy briefs:
  - Et kjempeløft for norsk vannmiljø?
  - Environmental improvement through revision of terms of hydropower licences
  - Whose hydropower
- Notater:
  - Status for vannkraft og vannforvaltning i Østerrike
  - Utprøving av HyMo-metoder
  - Guidance in how to use CEDREN results and methods



# Kommende leveranser og milepæler

- Rapport fra WP3
- Siste fokusgruppediskusjon i Sira-Kvina (fiske)
- HyMo-rapporter:
  - Internasjonale metoder
  - Anbefalt norsk metode for HyMo i Vannforskriften
- Journal-artikler
  - Utprøving av HyMo-metoder
  - Gjennomgang av vilkårsrevisjoner
- Flere rapporter, notat og journal-artikler
- Sluttprodukter