# **Gulf of Finland** Trilateral Scientific Forum 30th November-1st December, 2016

Finnish Environment Institute SYKE



# DAY I:WEDNESDAY, 30TH NOVEMBER

The Auditorium / SYKE building

### 10:00-11:00 Coffee and registration

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11:00-11:10	Paula Kankaanpää, SYKE Marine Research Centre
11:10-11:20	Saara Bäck, Ministry of the Environment of Finland

## Theme: the GOF2014 year and beyond, moderator Paula Kankaanpää

11:20-11:35	Kai Myrberg: The GOF2014 year is dea	ad, long live the trilateral environmental collaboration!

11:35-11:50 Mika Raateoja: The GOF Assessment -> The GOF Road Map

11:50-12:05	Heikki Pitkänen: Monitoring of eutrophication: observations and recommendations emerging
	from the GOF assessment work and the most recent data

12:05-12:20 Oleg Korneev: Approach for joint Gulf of Finland marine spatial plan development

#### 12:20-13:15 Lunch break

#### Keynote / moderator Darya Ryabchuk

13:15-13:30	Alexander Antsulevich: Environmental reseaches and surveys in frames of the Nord Stream
	2 project

13:30-13:45	Jorma Rytkönen, Kõuts T, Aysinov S: Some of the latest actions to improve maritime safety
	in the Gulf of Finland waters

13:45-14:00	Robert Aps, Fetissova M,Kotta J, Karvinen V, Kostamo K, Varjopuro R: Towards
	environmental safety of maritime spatial planning for sustainable blue economies

14:00-14:15	Andrey Pedchenko, Raid T, Pakarinen T: Some aspects on further joint fisheries research in
	the Trilateral Estonian-Finnish-Russian cooperation in the Gulf of Finland

14:15-14:30 Leena Laamanen, Kaitaranta J: Developing a holistic assessment of ecosystem health in the Baltic Sea.

#### 14:30-15:00 Coffee break

## Afternoon session / moderator Robert Aps

15:00-15.30	Special programme:	Trilateral environmental	collaboration -	- where are	vou heading at?

15:30-15:45	Sergei Golubkov, Golubkov M, Tiunov A, Nikulina V: The role of allochthonous and
	autochthonous organic matter in benthic food webs in the upper and in the middle part of
	the Neva Estuary

15:45-16:00	Ekaterina Voyakina, Andreeva I: Seasonal and interannual dynamics of phytoplankton and
	chlorophyll a in eastern part of Gulf of Finland

16:00-16:15	Mikhail Golubkov, Golubkov S: Primary production and Chlorophyll a concentration in mixing
	zone of the Neva Estuary

- 16:15-16:30 Harri Kuosa: The eastern Gulf of Finland eutrophication status according to GoF data set
- 16:30-16:45 Vladimir Ryabchenko, Isaev A, Eremina T, Savchuck O, Vankevich R: Model estimates of the eutrophication of the Baltic Sea and Gulf of Finland in modern and future climate

#### 16:45-17:00 Day 1 - discussion

#### 17:00-18:00 Poster session

#### 18:00-Dinner and get-together (Kuhankeittäjä, SYKE)

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**Gulf of Finland Co-operation** 

and prospects in relation with climate change:

Eastern part of the Gulf of Finland

13:15-13:30 Dmitry Burkov, Ivanchenko A: Estimation of pollution of air pool in port from vessels

# DAY 2:THURSDAY, IST DECEMBER

DAY 2:THURSDAY, IST DECEMBER						
SESSION A	A - The Auditorium / Alexander Antsulevich	SESSION E	3 - Auditorium Muuttohaukka / Urmas Lips			
9:15-9:30	Dmitry Lajus: Fisheries and fish populations in the Eastern Gulf of Finland during the 15-20 <sup>th</sup> centuries	9:15-9:30	Nadezhda Berezina, Gubelit Y, Polyak Y, Sharov A: An integrated approach to the assessment of the eastern Gulf of Finland health			
9:30-9:45	Nikolai Kovalchuk: Pilot estimation of species biodiversity of macroalgae on some water areas of the creating strict nature reserve	9:30-9:45	Alexander Rybalko, Korneev O.: Problems of the organization of joint control over the state and health of the ecosystem of the Gulf of Finland			
9:45-10:00	"Ingermanlandsky" Aleksandr Egorov, Aladin N, Asanova T, Dianov M, Zhakova L, Nikitina T, , Zueva N, Plotnikov I,	9:45-10:00	Natalja Kolesova, Siimon K-L: The effect of contaminants on Monoporeia affinis embryos in the Gulf of Finland			
	Smurov A: Main results of the two-year studies made by Aqua biological research unit under umbrella of ENPI Project SE717	10:00-10:15	Eugene Daev, Barabanova L: Cytogenetic estimation of water state in Dubki recreation area of the Gulf of Finland near Saint-Petersburg			
10:00-10:15	Veronica Tarbaeva, Vorobyova E: Enhancement of data provision system of the state monitoring of the Russian part of a catchment basin of the Baltic Sea on a condition of superficial water currents and the marine environment in HELCOM					
10:15-10:45	Coffee Break	10:15-10:45	Coffee Break			
10:45-11:00	Petri Ekholm, Ollikainen M, Punttila E, Puroila S: Reducing agricultural phosphorus losses in a large- scale gypsum pilot	10:45-11:00	Tatiana Kuznetsova, Kholodkevich S, Sharov A, Kurakin A, Lips U, Kolesova N: Testing applicability of a bioelectronic cardiac monitoring			
11:00-11:15	Sergei Kondratyev, Ivanova E: Assessment of the possibility of carrying out of BSAP recommendations to reduce nutrient load into the Gulf of Finland from		system for the determination of biological effects of pollution on bioindicator species in the Gulf of Finland			
	the Russian part of the catchment area	11:00-11:15	Arvo Tuvikene, Kreitsberg R, Baršienė J: Biomarkers of environmental contaminants in the			
11:15-11:30	Maria Kämäri, Tattari S, Koskiaho J, Lotsari E: How accurate are estimates of external riverine loads entering into Gulf of Finland?		coastal waters of Estonia: effects on perch, flounder and Baltic herring			
11:30-11:45	Tatjana Eremina, Voloshchuk E, Khaimina O, Vladimirova O, Kochetkova E: Assessment of biogeochemical changes in the sediments of the Eastern Gulf of Finland	11:15-11:30	Taavi Liblik, Stoicescu S-T, Lips U: Variations of the halocline and oxygen distribution in the Gulf of Finland			
		11:30-11:45	Natalia Lemeshko, Evstigneev V: Current climate change over the territory of the Leningrad region and their consequences			
11:45-12:45	Lunch break	11:45-12:45	Lunch break			
	Alexey Maximov, Berezina N, Vladimirova O, Eremina T, Isaev A: The recent measurement of benthic phosphate fluxes in the eastern Gulf of Finland	12:45-13:00	Jouni Lehtoranta, Savchuk O, Elken J, Dahlbo K, Kuosa H, Raateoja M, Kauppila P, Räike A, Pitkänen H: Atmospheric forcing controlling interannual nutrient dynamics in the open Gulf of Finland			
13:00-13:15	Yulia Polyak, Bakina L, Shigaeva T, Kudryavtseva V, Gubelit Y: Factors and mechanisms controlling microbial distribution, activity and dynamics in the	13:00-13:15	Leonid Bugrov, Eremina T, Kohanyuk E, Ryabchenko V: Aquaculture development concerns			

eastern Gulf of Finland coastal sediments

based environmental safety management of maritime navigation in the Gulf of Finland (Baltic Sea)

F, Kujala P, Tabri K: Systems-theoretic approach

13:15-13:30 Robert Aps, Fetissov M, Heinvee M, Goerlandt



30<sup>th</sup> November–I<sup>st</sup> December, 2016 Finnish Environment Institute SYKE



#### 13:30-14:00 Coffee break

Plenary: the Auditorium, moderator Kai Myrberg

14:00-14:15 Henry Vallius: Sediment quality in the Gulf of Finland

14:15-14:30 Maiju Lehtiniemi, Setälä O: Microplastic research in the Gulf of Finland- present knowledge and future plans

14:30-14:45 Andrei Lappo, Danilova L: To the question about holistic GoF

14:45-15:00 Kai Myrberg: Results of the special programme

15:00-15:30 Day 2 - discussion, concluding remarks

15:30 Closing the forum

#### **POSTERS**

L.Barabanova \*,S. Galkina ,E. Mikhailova

Karyotype analysis of amphipod Gmelinoides fasciatus in the population from the Gulf of Finland

A. Brodsky, E. Pankova, D. Safronova\*, V. Samuta

Influence of heavy metals on littoral communities due to the dredging work in Saint-Petersburg water zone

J. Bublichenko

The Great Cormorant (Phalacrocorax carbo sinensis) in the Eastern part of the Gulf of Finland, Russia

G Frumir

Input of nutrients to the Gulf of Finland from Russian and transboundary rivers

E. Glazkova

Invasive vascular plant species in the flora of the Russian islands in the Gulf of Finland

Yu.Gubelit\*, N. Berezina, Yu. Polyak , G. Dembska, G. Pazikowska-Sapota

"Green tides": regulating factors and main consequences for the coastal zone in the eastern Gulf of Finland, Baltic sea.

N.N.Kamardin

The bioindication of chronic pollution of littoral vegetation and soil using terrestrial molluscs Bradybaena fruticum Mull.

S.V. Kholodkevich, A.N. Sharov

Bivalve mollusks of eastern part of the Gulf of Finland as a tool for ecosystem health bio-indication

V. Malyshev, T. Zmeeva

Evaluation of the monitoring results of microbial and viral contamination of waters of the Neva Bay and the Gulf of Finland

A. Jaanus, S. Lehtinen, M. Nurmi, A. Sharov\*, E. Lange

Phytoplankton long-term monitoring in the Gulf of Finland

V. Sukhachev, E. Zakharchuk, U. Lips, N. Tikhonova, I. Suhhova

Water dynamics and variability of thermohaline structure during the dangerous sea level rises in the Gulf of Finland.

A. Demchuk\*, S. Golubkov

Feeding of three-spined stickleback (Gasterosteus aculeatus L.) in Eastern Gulf of Finland

E. Chernova\*, I. Russkikh, E. Voyakina, Z. Zhakovskaya, M. Orlova

Cyanotoxins Occurrence in Gulf of Finland, 2012-2015

I. Russkikh \*, E.Chernova, Z. Zhakovskaya, V. Nikiforov, N. Vieno

Hormones as an indicator of anthropogenic pollution of the Baltic Sea (2011-2013)

B. Babikov
Monitoring of the water feeding of the rivers in Leningrad region
A. Lappo, L. Danilova
Proposals on structure of INPUT and OUTPUT Data for holistic GoF MSP
M. Polyak\*
A modern approach to visualisation of long-term biological monitoring data of the Neva Bay
O. Liashenko ,E. Svetashova ,S. Ekimova
Heavy metal content in fish and their habitat in the Neva Bay of the Gulf of Finland
E. Litina\*, E. Zakharchuk, N. Tikhonova.
Assessment of nonstationarity in seasonal variability of thermohaline structure in the Gulf of Finland
O. Susloparova, Y. Zuyev, V. Ogorodnikova
Present state food supply for fish in the eastern Gulf of Finland
O. Valdez Banda, F. Goerlandt, P. Kujala
Strategic and Operational Risk Management for Wintertime Maritime Transportation System (STORMWINDS)

R. Vankevich, E. Sofina, O. Vladimirova, T. Eremina

Modelling of the submesoscale flows in the Gulf of Finland (GOF)

E. Kochetkova, A. Isaev, T. Eremina

Application of the Remote Sensing and In-Situ Data for Chlorophyll a Variability simulation in The Eastern part of the Gulf of Finland

K-L. Siimon, N. Kolesova, U. Raudsepp

Fucus vesiculosus morphology and its associated fauna along southern coast of the Gulf of Finland