Introduction on status of conservation and sustainable use of marine biodiversity in Russian part of NOWPAP region.

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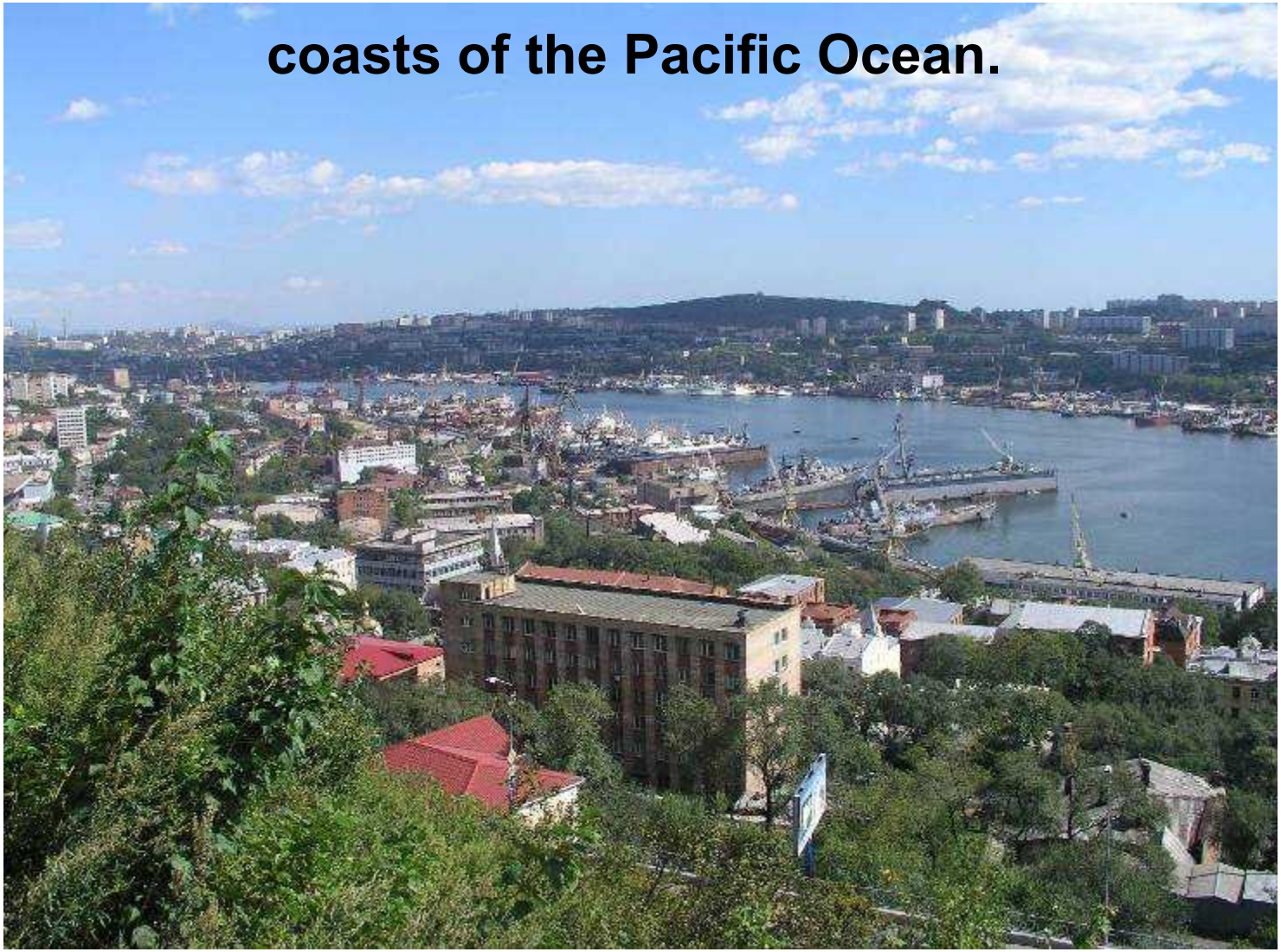
- Marine and coastal waters of Russia are the environment for a considerable diversity of habitats and species.
- The coastal and marine environment of Russia includes a great number of the unique coastal objects which provide habitat conditions for many biota representatives.
- Some biotopes, such as shallow hydrothermal objects, cold channels and mud volcanoes are unique and have biota of the global importance.
- Phenomena, periodically repeating in the open sea, such as frontal zones, upwellings and stationary glades in the freezing seas, are of special importance for maintenance of the sea productivity and biodiversity.

According to the Constitution of the Russian Federation internal marine resources, territotial waters, exclusive economic zones and the continental shelf are under the federal jurisdiction.

In Russia, about 17 millions people live in the coastal zone (within a belt of 50 km from the coastline) and only 5 millions of them render habitable the coastal zones of the Far-Eastern seas – Bering, Okhotsk, Japan and open coasts of the Pacific Ocean.



The Russian coast is characterized by a rich natural-resource potential but its intensive development started only in the last 60 years.

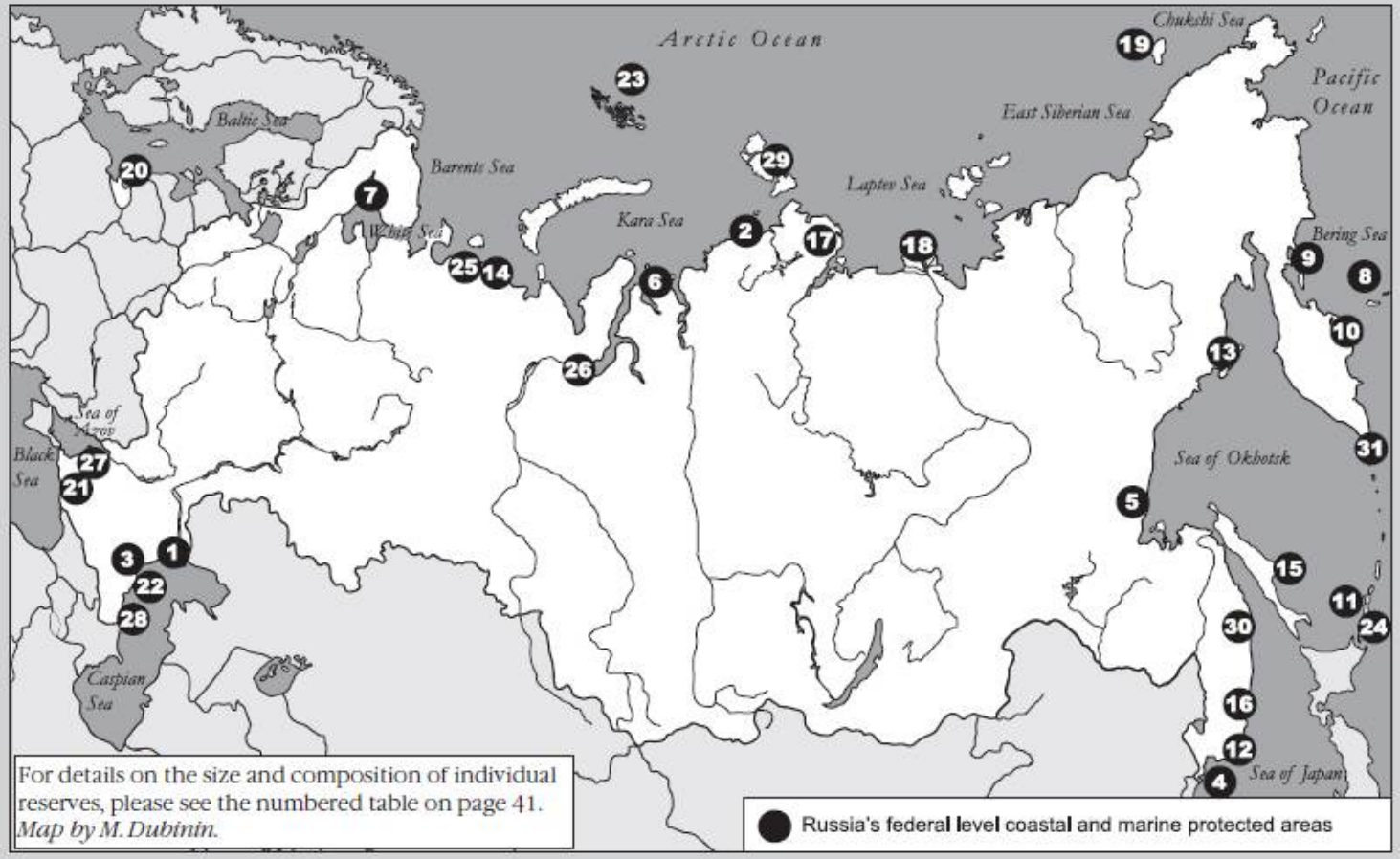
Main present and potential environmental issues and threats for biodiversity in Russian Far East

- The Far East of the Russian Federation as a whole, and its south area first of all, is unrivalled among all regions of Russia in diversity of fauna and flora species, including in the coastal zones.
- In this region there are numerous unique natural objects, many of which are of international or federal importance.
- By virtue of the geographical position of the region, high activity of geological processes and specific climatic peculiarities, the unique natural complexes, characterised by considerable contrast of landscapes, by their complex spacial combination and a set of various biological species, were generated.
- At the same time, results of inventory of the status of the plants species included in the Red Data Books, carried out in MPA, has revealed that more than a half of them are not protected.
- Thus the region economics has a strongly pronounced nature/resource orientation. Therefore the problem of maintainance of balance between economic development and conservation of the unique nature here is of particular relevance.

- The marine and coastal EPA of the federal significance in the existing EPA system are located nonuniformly and not representatively in comparison with their continental analogues. This is one of the reasons for relevant development and expansion of the MCPA network with a view of conservation of the unique natural heritage and diversity of coastal and marine ecosystems of Russia.
- On the coast of the Far East seas of Russia out of 23 physical/geographical provinces there are no MPA only in three of them. The MPA of the federal value are located in 11 provinces (48 %), and MPA of the regional and local value are presented in 16 provinces (70 %). That is above the indicator for the Arctic seas. The degree of representation of provinces in MPA of the federal and regional value in the region reaches 87 % as a whole.


WWF
МОРСКИЕ ОХРАНЯЕМЫЕ ПРИРОДНЫЕ ТЕРРИТОРИИ РОССИИ
RUSSIA`S MARINE PROTECTED AREAS
МОРСКИЕ ОХРАНЯЕМЫЕ ПРИРОДНЫЕ ТЕРРИТОРИИ РОССИИ

Russia's Federal Level Coastal and Marine Protected Areas



Zapovedniks

1. Astrakhansky
2. Bolshoi Arktichesky
3. Dagestansky
4. Dalnevostochny Morskoi
5. Dzhugdzhursky
6. Gydansky
7. Kandalakshsky
8. Komandorsky
9. Koryaksky
10. Kronotsky
11. Kurilsky
12. Lazovsky
13. Magadansky
14. Nenetsky
15. Poronaisky
16. Sikhote-Alinsky
17. Taimyrsky
18. Ust-Lensky
19. Wrangel Island

National Parks

20. Kurshskaya Kosa
21. Sochinsky

Zakazniks

22. Agrakhansky
23. Franz Josef Land
24. Maliye Kurily
25. Nenetsky
26. Nizhne-Obsky
27. Priazovsky
28. Samursky
29. Severozemelsky
30. Tumninsky
31. Yuzhno-Kamchatsky

Russia's Federal Level Coastal and Marine Protected Areas

	Protected Area			Total Area Protected (hectares)			Buffer Zone (hectares)		
	Name of Reserve	Int'l Status	Ocean, Sea, or Seas	Terrestrial/ Coastal Habitats	Marine	Total	Terrestrial/ Coastal Habitats	Marine	Total
	Zapovedniks								
1.	Astrakhansky	BR, RW	Capsian	56,619	11,298	67,917	10,000	21,000	31,000
2.	Bolshoi Arkticheskiy		Kara, Laptev	3,188,288	980,934	4,169,222	9,550	0	9,550
3.	Dagestansky		Caspian	576	18,485	19,061	1,175	19,890	21,065
4.	Dalnevostochny Morskoi	BR	Japan	1,316	63,000	64,316	1,831	86,350	88,181
5.	Dzhugdzhursky		Ohkotsk	806,256	53,700	859,956	252,600	0	252,600
6.	Gydansky		Kara	878,174	0	878,174	90,000	60,000	150,000
7.	Kandalakshsky	RW	Barents, White	20,947	49,583	70,530	0	0	0
8.	Komandorsky	BR	Bering, Pacific	185,379	3,463,300	3,648,679	64,498	2,112,900	2,177,398
9.	Koryaksky	RW	Bering	244,156	83,000	327,156	676,062	0	676,062
10.	Kronotsky	BR, WH	Pacific	1,007,134	135,000	1,142,134	0	0	0
11.	Kurilsky		Pacific, Okhotsk	65,365	0	65,365	41,475	32,000	73,475
12.	Lazovsky		Japan	120,998	0	120,998	15,978	0	15,978
13.	Magadansky		Okhotsk	883,817	0	883,817	55,600	38,100	93,700
14.	Nenetsky		Barents	131,500	181,900	313,400	26,400	242,800	269,200
15.	Poronaisky		Okhotsk	56,695	0	56,695	0	0	0
16.	Sikhote-Alinsky	BR, WH	Japan	398,528	2,900	401,428	62,550	5,110	67,660
17.	Taimyrsky	BR	Laptev	1,744,910	37,018	1,781,928	937,760	0	937,760
18.	Ust-Lensky		Laptev	1,433,000	0	1,433,000	0	1,050,000	1,050,000
19.	Wrangel Island	WH	Chukchi, East Siberian	795,650	1,430,000	2,225,650	0	3,240,000	3,240,000
	National Parks								
20.	Kurshskaya Kosa	WH	Baltic	6,621	0	6,621	0	0	0
21.	Sochinsky		Black	193,737	0	193,737	0	0	0
	Zakazniks								
22.	Agrakhansky		Caspian	27,180	11,820	39,000	0	0	0
23.	Franz Josef Land		Barents	1,600,000	2,600,000	4,200,000	0	0	0
24.	Malye Kurily		Pacific, Okhotsk	19,800	25,200	45,000	0	0	0
25.	Nenetsky		Barents	188,500	120,000	308,500	0	0	0
26.	Nizhne-Obsky	RW	Barents	128,000	0	128,000	0	0	0
27.	Priazovsky		Azov	42,200	0	42,200	0	0	0
28.	Samursky		Caspian	11,200	0	11,200	0	0	0
29.	Severozemelsky		Kara, Laptev	421,701	0	421,701	0	0	0
30.	Tumninsky		Okhotsk	143,100	0	143,100	0	0	0
31.	Yuzhno-Kamchatsky	WH	Pacific, Okhotsk	225,000	0	225,000	0	0	0
	Total			**15,026,347**	**9,267,138**	**24,293,485**	**2,245,479**	**6,908,150**	**9,153,629**

International status: BR – Biosphere Reserve, RW – Ramsar Wetland of International Importance, WH – World Heritage Site.
Note: The information presented in this table was compiled by *RCN* editors using materials provided by the Ministry of Natural Resources of the Russian Federation and individual reserves. Data on Dalnevostochny Morskoi Zapovednik's buffer zone was calculated using the Protected Areas GIS database of the *Biodiversity Conservation Center/International Socio-Ecological Union.*

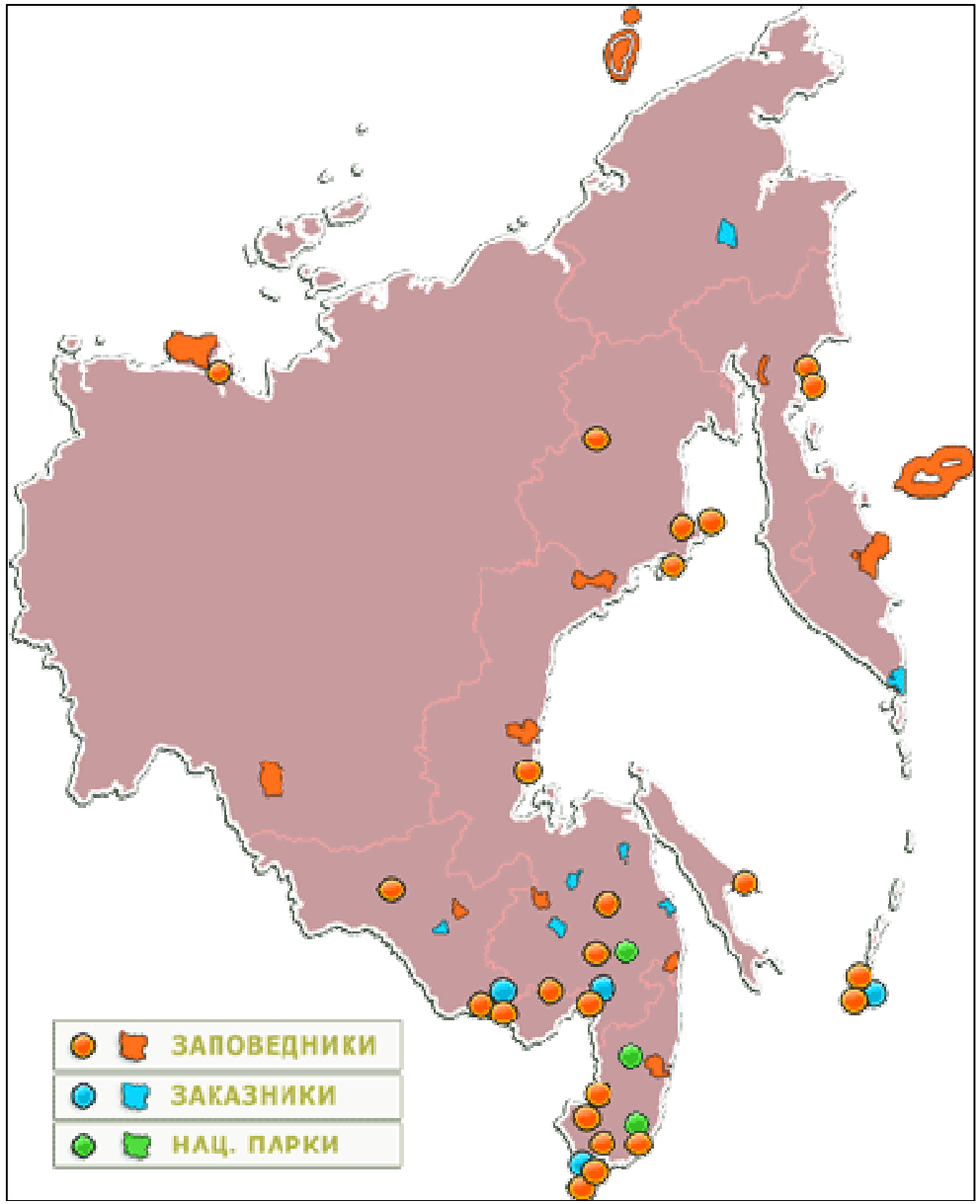
State Marine PA in the Russian Far East

#	Name of a reserve (zapovednik)	International status	Ocean / sea	Land coastal habitats (ha.)	Marine habitats (ha.)	Total area (ha.)	Marine buffer zone (ha.)
Reserves (IUCN category I)							
1	Far Eastern Marine	BR	Sea of Japan	1,316	63,000	64,316	86,350
2	Kuril		Pacific Ocean, Okhotsk Sea	65,365	0	65,365	32,000
3	Lazovsky		Sea of Japan	120,998	0	120,998	0
4	Sikhote-Alin	BR, BH	Sea of Japan	398,528	2,900	401,428	5,100
NationalParks							
5	Land of the Leopard	BR	Sea of Japan	261,868.84	0	261,868.84	0
Wildlife refuges (IUCN category IV)							
6	Tumninsky		Okhotsk Sea	143,100	0	143,100	0

Regional MPA of FE of RF subjects including marine plots

#	SPNA name	Status	Ocean / sea	Landco astalha bitats (ha.)	Marineha bitats (ha.)	Totalarea (ha.)	Marinebuff erzone (ha.)
Wildlife refuges							
7	Vostok Bay	Belongs to research station of the Institute of Marine Biology FEB RAS	Sea of Japan		1,820	1,820	
Natural parks							
8	Moneron Island		Sea of Japan	24,600		24,600	2 kmaround the Island

System of specially protected natural areas and water areas of the Far East of Russia

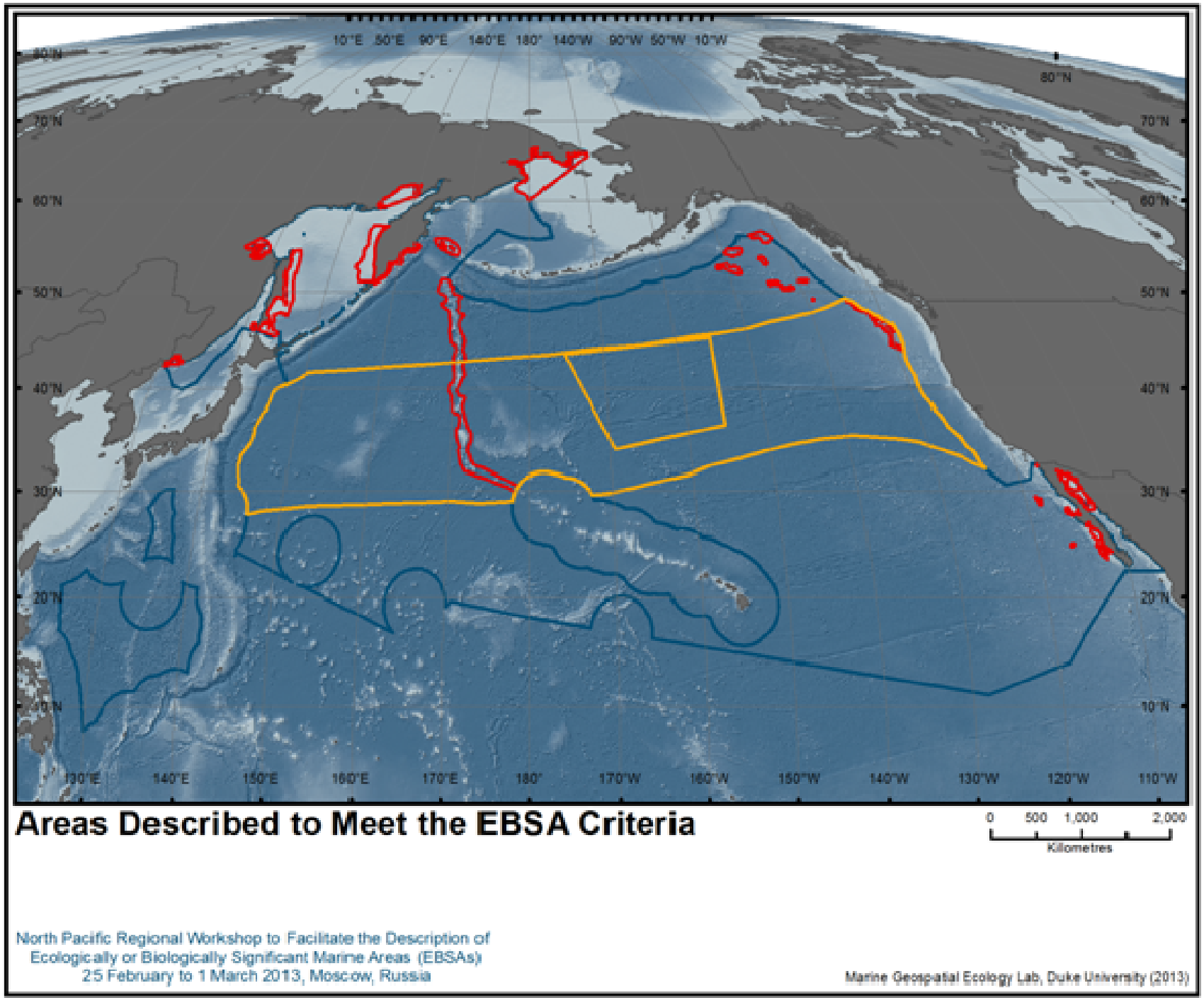


- Russian scientists recommend to create up to 26 MPA of the federal value in the Far East seas aquatoria with particular attention to aquatoria of the coast of the Sakhalin island where anthropogenous loading has essentially increased.

- in Moscow, Russia – 25 February to 1 March 2013 was CBD regional workshop to facilitate the description of ecologically or biologically significant marine areas (EBSAs) in North Pacific.
- At this CBD regional workshop Russian and international experts have described a number of marine and coastal areas as ecologically or biologically significant marine areas (EBSAs) in Russian Far East

Comparison of Criteria

CBD EBSMAs	FAO VME
Uniqueness or rarity	Uniqueness / rarity
Special importance for life history stages of species	Functional significance of habitat
Importance for threatened, endangered or declining species and/or habitats	Fragility
Vulnerability, fragility, sensitivity or slow recovery	Life history attributes of species
Naturalness	
Biological productivity	Structural Complexity
Biological diversity	


10°E 50°E 90°E 140°E 180° 140°W 90°W 50°W 10°W
80°N
70°N
60°N
50°N
40°N
30°N
20°N
10°N
130°E 140°E 150°E 160°E 170°E 180° 170°W 160°W 150°W 140°W 130°W 120°W 110°W
Areas Described to Meet the EBSA Criteria
0 500 1,000 2,000
Kilometres
North Pacific Regional Workshop to Facilitate the Description of
Ecologically or Biologically Significant Marine Areas (EBSAs)
25 February to 1 March 2013, Moscow, Russia
Marine Geospatial Ecology Lab, Duke University (2013)

DESCRIPTION OF AREAS MEETING EBSAs CRITERIA IN NORTH PACIFIC AS AGREED BY THE WORKSHOP PLENARY

Number	Areas meeting EBSA criteria (See the detailed description of compiled EBSAs in appendix to Annex IV)
1	Peter the Great Bay, Russia
2	West Kamchatka shelf, Russia
3	South East Kamchatka coastal waters, Russia
4	Eastern shelf of Sakhalin island, Russia
5	Moneron island shelf, Russia
6	Shantary islands shelf, Amur and Tugur bays, Russia
7	Commander Islands shelf and slope, Russia
8	East and South Chukotka coast, Russia
9	Yamskie Islands and western Shelikhov Bay, Russia

- In 2012 the Draft concept of development of Marine Protected Areas in the Russian Federation (MPA development concept) was established by the experts of Working Group of Ministry of natural Resources of Russia

- The MPA development concept results from importance of the problem in the frame of international cooperation, including Russia's obligations on CBD (Convention of Biological Diversity).
- It also takes account of particular importance and responsibilities of Russia which possesses natural resource and environmental stabilization potentials of global scale and meets the requirements of national development and basic decisions of UN in the field of sustainable development.

- The concept is aimed at increasing role of the Russian Federation in the global resource and nature protection collaboration.

- Main tasks of MPA should be support of natural processes of self-regeneration of marine ecosystems, prevention and reduction of new anthropogenic impacts, studying of condition and features of their functioning, as well as monitoring and forecast of natural regeneration processes and reaction to the character and intensity of external impacts, including anthropogenic.

To achieve the abovementioned tasks it is necessary:

- - to define the basic indicators of MPA condition
- - to provide overall estimation of the existing potential of MPA development, financing of basic directions of related activities and the experience gained in MPA management;
- - to estimate main threats to marine biological diversity
- - to reveal long-term priorities in the MPA development in conditions of growing anthropogenic press to coastal and marine ecosystems and climatic changes.

To define functional importance of MPA condition the following criteria are offered (Shlotgauer S.D.), (Puzachenko A.Yu.):

- Value of biodiversity parameters, number and condition of the Red Book taxons, representation of flora and fauna (local, regional, global), value of maintaining exploited populations of marine biota species, estimation of spatial effect of the protection, defined by presence in biota structure of distant and non-distant migrants and species with seasonal and regular moving beyond the MPA borders;
- Area, territorial structure, characteristics of MPA borders;
- The list of performed and potential ecological functions, including environmental service on local and regional levels;
- Estimation of ecological risk and its forecast, dynamics of number of the factors limiting implementation of some MPA functions, including estimation of hazard from various types of nature management;

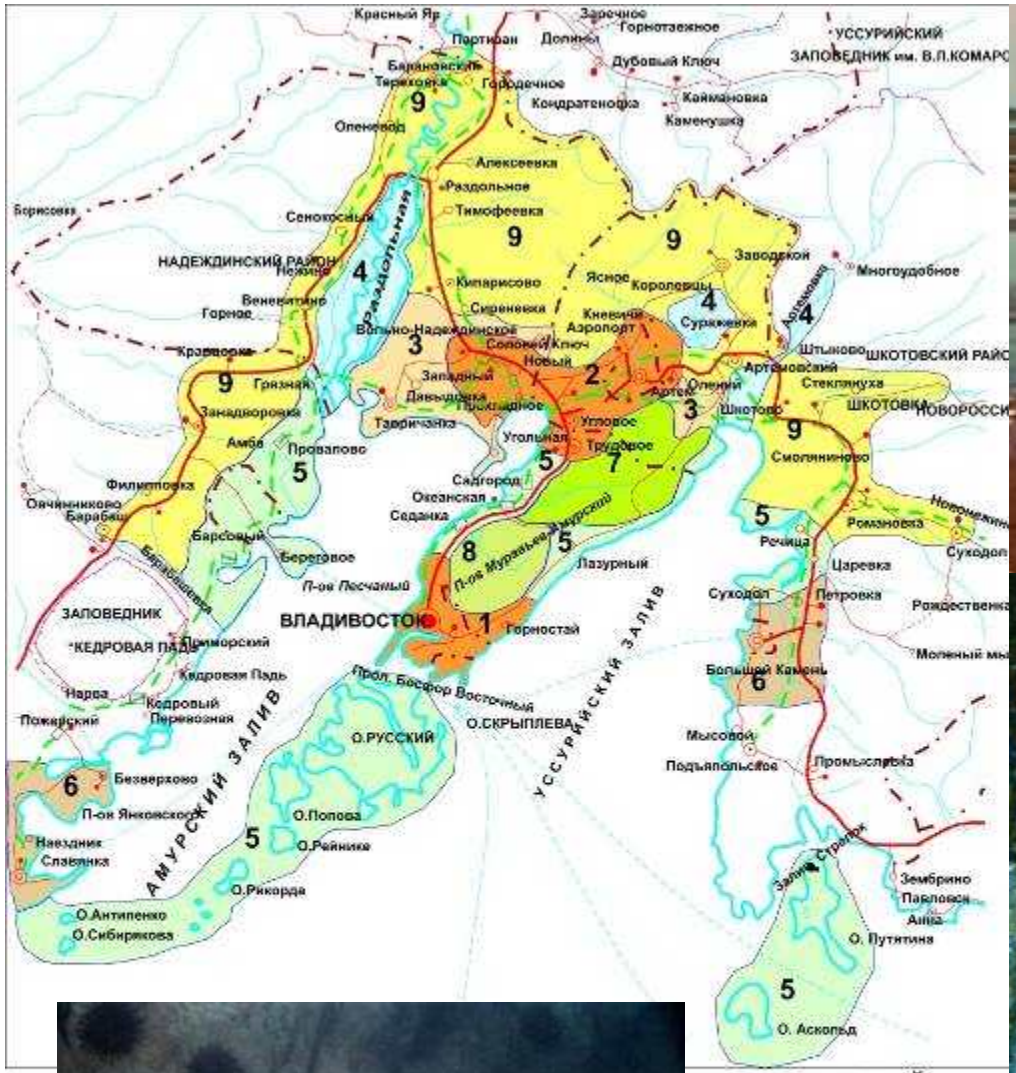
(2) To define functional importance of MPA condition the following criteria –

- Estimation of position and value of MPA in the network of Specially Protected Areas;
- Estimation of size of anthropogenic load on PA ecosystems, including quantity of alien and synanthropic species, degree of their introduction in native coastal and marine ecosystems;
- Estimation of degree of economic infrastructure development (road network, settlements, industrial objects, etc.) and population density within PA borders and on adjacent territory;
- Staffing level of MPA, educational level and qualifications of the employees;
- Estimation of participation (competence) of MPA personnel in decision-making concerning conservation of the environment, nature management and ecological education on regional level

Peter the Great Bay

- The area is characterized by high biodiversity due to a mix of northern and subtropical fauna.
- Phytoplankton abundance is 2 – 5 g/m3, 60% of which are diatoms. Red tides occur in spring.
- Total fish biomass is estimated at 80,000 – 100,000 tonnes. Sharks are regularly observed in this area, which serves as a feeding area. Tiger shark have been regularly seen. White shark started coming in recent years, and attacks on people have been recorded at the border with DPRK. Makka shark have also occurred in the area and a case of spawning was recorded lately.
- Fish diversity counts 277 species.
- Marine area and islands are inhabited by more than 350 species of birds, 200 of which are connected with the sea.

Ecosystems are locally changed near Vladivostok, but the area in general is much more natural than adjusting ones.



ИЕ ТЕРРИТОРИЙ
Й АГЛОМЕРАЦИИ

1-го этапа освоения
2-го этапа освоения

а

ункциями
ая, сельскохозяйственная и т.п.)

Moneron Island Shelf

- Biodiversity hotspot, high diversity of benthic communities. Intact marine ecosystem.Sponges and bryozoans aggregations, red hydrocorals.North boundary of abalone (*Haliotis*) range. Density of abalone has big amplitude between years which is caused by natural factors. The only rookery of Steller's sea lion in the southern part of the Sea of Okhotsk (boundary water mass between the Sea of Okhotsk and the Sea of Japan).The highest density of zooplankton.
- A branch of the Curosio current causes high biodiversity of the area. High density of marine flora and zooplankton is a result of local upwelling. High diversity of fish species and benthic organisms. Moneron island and smaller islands contain large seabird colonies. Nesting area for many species of birds connected with the marine realm.
- There is no human activity in the area now, except for occasional tourism. If this situation remains unchanged, the Moneron shelf will not degrade.
- The area is currently protected under Russian national law for its biodiversity values.


Russia
Moneron Island Shelf, Russia
Area: 3358 km²
0 5 10 20
Kilometers
North Pacific Regional Workshop to Facilitate the Description of
Ecologically or Biologically Significant Marine Areas (EBSAs)
25 February to 1 March 2013, Moscow, Russia
Marine Geospatial Ecology Lab, Duke University (2013)

A number of nature reserves in the Russian Far East have designated marine areas. First, we must select **Lazo State Nature Reserve,** which includes otsrov Petrov.

The basic protected ecosystems: woods of Sikhote-Alin, natural complexes of the coastal part of the Sea of Japan, the rivers of salmon, unique island ecosystems.

Very important site of coastal ecosystems is protected sea area of the **Sikhote Alin State Nature Biosphere Reserve.**
(401 428 hectares, including 2,900 hectares - sea area)
In UNESCO classification it is shown as an object including the most important or considerable habitat for conservation of biological variety, including endangered species of exclusive world value from the point of view of science and protection

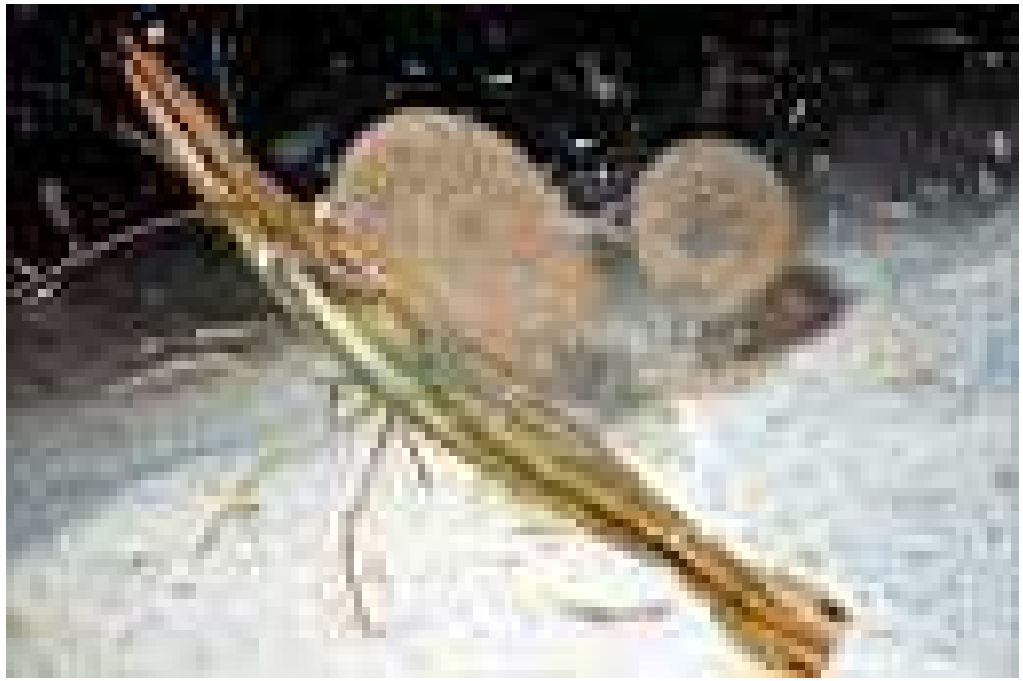
Рис 1. Оз. Благодатное у канала
Фото Заумысловой О.Ю.

Far Eastern Natural Marine Biosphere Reserve

- Purpose of establishment: environmental conservation of the structurally richest marine and island fauna and flora of the Peter-the-Great Bay of the Sea of Japan, and first of all gene pool of sea organisms.

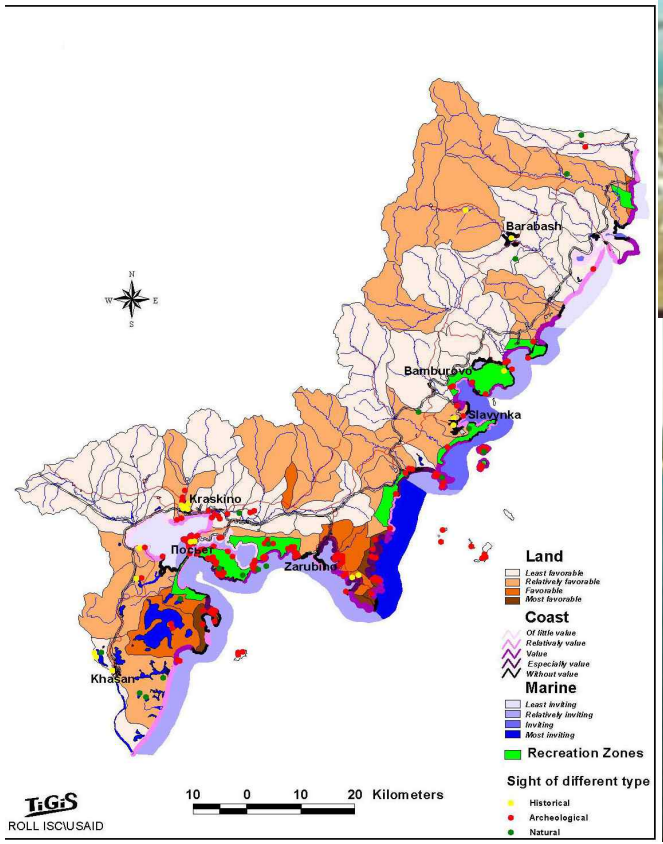
- The basic conservation objects: animals - Far Eastern trepang, king crab, giant Pacific octopus, Pacific needlefish, Japanese dace, Japanese sandfish, larga seal, Chinese egret, spoonbill, Styan's Grasshopper Warbler; plants - Limonium tetragonum, Lilium lancifolium, Japanese Red Pine, Japanese yew, Parthenocissus tricuspidata, Royal Azalea, Quercus dentata.

- Local natural phenomena are underwater world, being a unique combination of the boreal-Arctic and subtropical faunae, and Furugelm Island, hosting the world's largest colonies of black-tailed gull and Japanese cormorant, as well as Russia's only nesting place of Chinese egret and spoonbill.



Khasansky Nature park

- The area of the park is a rest place for migratory birds on their international migration way and falls under the directions of Global Ramsard Convention on the Wetlands of International Importance Especially as Wildlife Habitat (directive by the Administration of Primorsky Krai #276 of 26.05.1995 on the status of wetland in southern Khasansky District) and three bilateral conventions - On conservation of migratory birds and threatened birds as well as their habitats (signed by DPRK and USSR, Japan and USSR, and RoK and USSR).
- Many tens of thousands birds rest there during their migrations. Count per saltum for ducks shows that the site can host to 50,000 individuals. Species composition of birds also impresses, as more than 100 species nest there; besides, not less than 100 other species rest there during their migrations. The territory performs as a base for replenishing of energy for these birds on their distant way.
- There were registered 26 duck species, several goose species, around 50 sandpiper species, swans, rail species, herons.


Barabash
Bamburovo
Slavynka
Kraskino
Посьет
Zarubino
Khasan
Land
Least favorable
Relatively favorable
Favorable
Most favorable
Coast
Of little value
Relatively value
Value
Especially value
Without value
Marine
Least inviting
Relatively inviting
Inviting
Most inviting
Recreation Zones
Sight of different type
Historical
Archeological
Natural
10 0 10 20 Kilometers
TIGIS
ROLL ISC\USAID


9 21 '97


Thank You Very Much for your
attention