Text D Pollution in rivers

From a global point of view, rivers are important because they are major suppliers of water for drinking, personal hygiene purposes, industry and agriculture. In as far as water is used to drink, it is absolutely vital that it does not contain too many coli bacteria, because this would indicate the presence of other, more serious bacteria and viruses.

The fecal pollution starts to increase. Rivers in Australia, Japan, and the US all have fairly high coliform levels. However, when countries get rich enough they use groundwater to a much greater extent. It diminishes the urgency and political inclination to push for ever lower fecal pollution levels. Nevertheless, the conclusion remains true for the large majority of countries that depend on rivers for drinking water. At the outset richer means more polluted rivers, but beyond a fairly low level. Richer actually implies less fecal pollution in the rivers.

Biologically speaking, however, the level of oxygen is a much more important measure of water quality than fecal coliform. Dissolved oxygen is absolutely essential for the survival of all aquatic organisms - not only fish but also invertebrates such as crabs, clams, zooplankton, etc. Moreover, oxygen affects a vast number of other water indicators, not only biochemical but esthetic ones like odor, clarity and taste. Consequently, oxygen is perhaps the most well-established indicator of water quality.

We have only looked at typical pollution indicators, such as coliforms and oxygen. But equally important, we may want to look at the aquatic levels of chemical pollution. Here we see the same pattern as in the coastal areas. In the US, a National Contaminant Biomonitoring Program has examined the presence of long-lived toxic contaminants in the aquatic environment through analysis of fish. Fish were selected because they tend to accumulate pesticides. The European starling was chosen because of its varied diet and wide geographic distribution.

Summing up rivers probably experience better water quality as income increases. This tendency towards improved oxygen levels has also been confirmed when analyzing more than 200 European rivers. Moreover, general quality measures for both the UK and the US show better river water quality. Persistent pollutants in fresh waters have been decreasing dramatically. When measured nationally through fish in the US or through herring gull eggs in the Great Lakes, pollutant concentrations have declined 80-90 percent.

VOCABULARY:

Fecal coliform	Фекальные	коли-	Fairly	Доволь	ьно,	В
	бактерии			некотор	рой степені	1

Coli bacteria	Коли-бактерии	Hygiene	Гигиена
Virus	Вирус	Dissolved	Растворенный
Urgency	Безотлагательность	Aquatic	Водяной
Inclination	Склонность,	Contaminant	Загрязняющее
	тенденция		вещество
To push for	Настаивать	Clam	Морской моллюск
Nevertheless	Тем не менее	Odor	Запах
At the outset	Вначале	Clarity	Прозрачность
Beyond	В пределах, вне	Pattern	Образец
Pesticide	Пестицид	Invertebrate	Беспозвоночные
Starling	Скворец	Herring gull	Серебристая чайка

EXECISE 1

Переведите следующие выражения: lower fecal pollution levels, we may want to look.

EXECISE 2

Ответьте на вопросы: 1. Why are rivers important? 2. Why is it vital to determine the continence of coli bacteria in water? 3. Do the rich countries pollute less their rivers? 4. What are two important measures of water quality? 5. What is the second important measure of water quality? 6. Why does oxygen affect a vast number of water indicators? 7. What are esthetic indicators of water quality? 8. How can we determine the aquatic levels of chemical pollution? 9. How has a National contaminant Biomonitoring Program examined the presence of long-lived toxic in the aquatic environment? 10. What is the interconnection between the water quality ant the increased incomes? 11. What is the main tendency of the last decades?

EXECISE 3

Найдите эквиваленты: в большом масштабе, настаивать на, с мировой точки зрения, для целей личной гигиены, уровни загрязнения воды химикатами, основной поставщик, намного более важный, самый признанный, устойчивый, токсичные загрязнители, разнообразная диета, подводя итоги, постоянные загрязнители, иметь склонность к накоплению, говоря с биологической точки зрения, большое количество.

EXECISE 4

Составьте фразы, соответствующие содержанию текста:

	coli bacteria. viruses.		
1. It is absolutely vital that water does no			
many	oil.		
2. Dissolved oxygen is absolutely	for the s	survival of all aquatic	
essential	organisms.		
	for our well-	being.	
	for coli bacte	eria.	
3. Esthetic indicators of water quality are	odor, clarity and taste.		
	dissolved oxygen.		
		coli bacteria.	
		pesticides.	
4. Fish were selected because they tend to	nitrates.		

oxigen.