

Questionnaire concerning the Protection of the Water Quality of Lake Nojiri

August 2010

This questionnaire is a joint initiative of Shinano Town Office, Shinshu University Institute of Mountain Sciences, and Shinshu University Innovation Research and Support Centre

I. Concerning environmental problems in general

Q1 Select the *three* issues from the list below that you consider most important. Please enter the code number you have selected in the answer sheets.

1. Increase in rubbish/garbage.
2. Air pollution
3. Noise pollution
4. Bad smells
5. Water pollution
6. Land contamination
7. Reduction in forests
8. Global warming
9. Marine pollution
10. Reduction in the cultivated land
11. Reduction in biodiversity (loss of species, extinctions, Ecosystem damage etc)
12. Damage to the ozone layer
13. Acid rain
14. Reduction in marshes and wetlands
15. Exhaustion of water resources
16. Desertification

Q1		
1st	2nd	3rd
<input type="text"/>	<input type="text"/>	<input type="text"/>

Q2 In your daily life, what particular steps or efforts do you take to help preserve the environment? Please enter the number of any of the actions below which apply into the answer sheet.

1. I save on paper use by using both sides of copy paper, etc
2. I avoid buying disposable items as much as possible
3. When I shop I don't accept plastic bags
4. I buy environmentally friendly goods such as recycled paper
5. I reduce as far as possible the amount of rubbish/garbage I throw away
6. I don't pour items such as cooking oil or leftover food down the sink

Q2		
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

7. I cooperate in separating recyclable waste including newspapers, cardboard, PET bottles, aluminium cans, batteries etc.
8. In my daily activities, I try to conserve electricity and water
9. I use low energy goods and appliances
10. I adjust the air-conditioning so it is not too cold, and heating so it is not too hot
11. I try and avoid making too much noise
12. Other [
13. I don't do anything special

Q3 In the future what sort of actions would like to take to help protect the environment?
Please enter the number of any which apply from the list below into the answer sheet.

1. I would like to make more effort in my daily life towards environmental protection
2. I would like to take part positively in local public activities and events towards protecting the environment
3. I would like to cooperate in some way towards raising the necessary funds for protecting the environment
4. There's nothing I particularly wish to do
5. Don't know
6. Other [

Q3

Q4 What kind of relationship do you think that schemes to protect the environment have to economic development? Please choose *one* statement below which is closest to your way of thinking and enter it into the answer sheet.

1. Efforts to protect the environment present a significant barrier to economic development
2. Efforts to protect the environment present a slight barrier to economic development
3. There is little or no relationship between efforts to protect the environment and economic development
4. Efforts to protect the environment help promote economic development to some degree
5. Efforts to protect the environment significantly promote economic development
6. Don't know
7. Other [

Q4

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Q5 Concerning the relationship between science/technology and environmental problems, there are the two ways of thinking below:

- A. Science and technology progress will solve environmental problems
- B. There are environmental problems which can't be solved even if there is science and technology progress

Which of these you think is closest to your view? Please select from the list below the answer which reflects your thinking and enter the number into the answer sheet.

1. Very close to A
2. Tendency to A
3. Tendency to B
4. Very close to B
5. Don't know
6. Other [

Q5

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II. Questions concerning the protection of Lake Nojiri water quality

Q6 What type of activity do you personally engage in concerning Lake Nojiriko? Please enter all the appropriate answer numbers into the answer sheet.

1. Walking
2. Jogging
3. Cycling
4. Picnic, looking at flowers
5. Fishing
6. Waters ports (swimming, water-ski, etc)
7. Events (firework festivals, triathlon etc)
8. Volunteer activities (cleaning the lakeside, cutting grass etc)
9. Fishing business
10. Take part in excavations at Lake Nojiri basin
11. Other [
12. Nothing in particular

Q6

Q7 Do you have an opinion concerning the water quality of Lake Nojiri? Below are criteria which could be used to assess the lake's quality. In order of priority, which do you think are the *three* most important factors? Please enter the answer numbers into the answer sheet.

1. High transparency
2. No appearance of 'freshwater red tide', massive breeding of algae or phytoplankton
3. No areas of aquatic plants
4. Enjoyable swimming
5. Measurements taken by the Prefecture and published (e.g. COD)
6. There are many fish
7. Don't know
8. Other [

Q7

1st	2nd	3rd

Q8 What do you think of the current quality of Lake Nojiri? Please choose *one* answer from the list below which is closest to your thinking and enter the number into the answer sheet.

1. The lake is clean
2. The lake is quite clean
3. The lake is not really clean but not dirty either
4. The lake is quite dirty
5. The lake is dirty
6. Don't know

Q8

Depending on the answer to Q8, please proceed as follows:

if your answer was 1 or 2, please proceed to Q9 and then Q11

if your answer was 4 or 5, please proceed to Q10 and then Q11

if your answer was 3 or 6, please proceed to Q11

Q9 This question is for those who answered 1 (the lake is pure) or 2 (the lake is quite clean). What is your reason for thinking this? Please choose *one* answer from the list below which is closest to your thinking and enter it into the answer sheet.

1. Because of the progress made in sewage treatment
2. Because of the spread of combined septic tanks
3. Because the population living in the Lake Nojiri area is quite small
4. Because rivers flowing into the lake are cleaned by water treatment ponds
5. Don't know
6. Other [

Q9

Q10 This question is for those who answered 4 (the lake is quite dirty) or 5 (the lake is very dirty) in Q8. What do you think is the reason for the lake's quality not being improved? Please choose *one* answer from the list below which is closest to your thinking and enter it into the answer sheet.

1. Sewage treatment systems are inadequate
2. The percentage connected to the sewage system is too low
3. Combined septic tanks are not spreading
4. Nitrogen, phosphorus etc. coming from the surrounding agricultural areas
5. Because conditions for Algal blooms are becoming more favorable due to global warming
6. Don't know
7. Other [

Q10

Q11 What do you think about the lake's water quality in the future? Please select the answer below which is closest to your thinking and enter it into the answer sheet.

1. It would be better if the water quality was significantly improved
2. It would be good if there was some improvement
3. The present water quality is sufficiently good
4. It's okay even if the water quality becomes a little worse than now
5. Don't know
6. Other [

Q11

Q12 Are you aware of the 4th Lake Nojiri water quality protection plan? Please select the answer below and enter it into the answer sheet.

1. I understand the contents well
2. I understand the contents to some extent
3. I recognize the name only
4. I have not heard of it
5. Other [

Q12

Q13 What do you think of the efforts to improve the quality of Lake Nojiri? Please select *one* answer from the list below and enter it into the answer sheet.

1. I am satisfied with the current efforts
2. I am generally satisfied with the current efforts
3. Neither satisfied nor dissatisfied
4. I am slightly dissatisfied with the current efforts
5. I am dissatisfied with the current efforts
6. Don't know

Q13

Q14 If we want to make efforts to improve the water quality of Lake Nojiri, what do you think would be the most effective policy? Please select *one* item from the list below and enter it into the answer sheet.

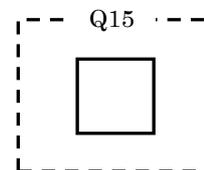
1. Sewage treatment facilities
2. Increase the percentage connected to the sewage system
3. Increase the use of combined septic tanks
4. Reduce the inputs of nutrients such as nitrogen and phosphorus from agriculture
5. Maintain lake vegetation
6. Remove Grass Carp
7. Don't know
8. Other [

Q14

Q15 What do you think is the value of Lake Nojiri? Please select *one* item from the list below which most closely represents what you see as the value of the lake, and enter it into the answer sheet.

1. Valuable as a water resource (water for agricultural use and rice growing, water reservoir, hydropower)
2. Valuable as an ecosystem (as a place for plants and animals to live)
3. Valuable for its scenery (the appearance of a lake)
4. Valuable for culture and lifestyle (as a place for walking and everyday activities, for learning and training)
5. Valuable for its businesses (tourist businesses, fishing businesses etc)

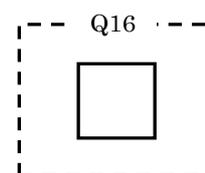
Q15



Q16 What is the aspect of Lake Nojiri's scenery that you most wish for? Please select *one* aspect below which you would most value and enter it into the answer sheet.

1. Birds near the lake can increase
2. A path could be maintained to walk along the lakeshore
3. Facilities for allowing people to enjoy water sports could be established
4. A park could be established at the lake side
5. The current situation is good
6. Don't know
7. Other [

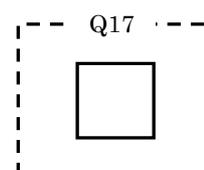
Q16



Q17 What do you think of the regeneration of the lake's aquatic plants? Please choose *one* answer from the list below and enter into the answer sheet.

1. I want the aquatic plants expanded over a wide area
2. I want the aquatic plants expanded a little bit
3. I only want aquatic plants round the lake edge
4. I think it is best not to have aquatic plants
5. Don't know
6. Other [

Q17



Depending on the answer to Q17, please proceed as follows:

if your answer was 1,2 or 3, please proceed to Q18 and then Q20

if your answer was 4, please proceed to Q19 and then Q20

if your answer was 5 or 6, please proceed to Q20

Q18 This is for those who answered 1, 2 or 3 to Q17. Why do you think it is a good idea to expand the lake's aquatic plants? Please select *one* answer from the list below which is closest to your thinking and enter into the answer sheet.

1. Because the aquatic plants make the scenery pretty
2. Because the aquatic plants is part of the natural lake scenery
3. Because if there are more aquatic plants the number of birds will increase
4. Because where there are aquatic plants, the number of insects (e.g. dragonflies) will increase
5. Because if there are more aquatic plants, water quality will improve
6. Don't know
7. Other [

Q18

Q19 This question is for those who answered 4 to Q17. Why do you think it is better not to have the aquatic plants? Please select *one* answer from the list below which is closest to your thinking and enter it into the answer sheet.

1. Because when the aquatic plants die it looks dirty
2. Because the aquatic plants will interfere with sightseeing boats and tourist boats
3. Because the aquatic plants may interfere with fishing
4. Because the aquatic plants may worsen the view from the lakeside
5. Because the aquatic plants will hinder water purification in the lake
6. Don't know
7. Other [

Q19

Q20 If you have another opinion concerning water policy and purification for Lake Nojiri, please write it down here.

Questions for Yourself

F1 Please state your gender

1. Male
2. Female

F1

F2 What is your age?

1. Under 20
2. 20-29
3. 30-39
4. 40-49
5. 50-59
6. 60-69
7. 70-79
8. 80 or over

F2

F3 What is your occupation?

1. Self-employed
2. Agriculture or forestry
3. Company employee
4. Employee of NPO, semi-public organization or group
5. Public employee
6. Housework
7. Part-time worker
8. Student
9. Unemployed or retired
10. Other [

F3

F4 How many times have you stayed at a cabin of NLA in summer?

1. First time
2. from second to fifth times
3. from sixth to tenth times
4. from 11th to 20th times
5. Over 21 times

F4

F5 In this summer, how many days will you stay at the cabin of NLA? How many people are staying at the cabin you are staying now including you?

Number of days days

Number of people peoples

Thank you very much for your cooperation in answering the above questions. Please place the completed questionnaire into the envelope and put it into the Questionnaire Return Box at the NLA Business Office by the 20th of August.