Monitoring Form

Form PC: Monitoring Form during Pre-Construction Phase (Quarterly)

a) Monitoring Period from 01 April 2024

To 30 June 2024

S.N.	Items	Check Point and Methods	Frequency	Evaluation or Mitigation status Y:Good /Yes N: Poor /No	Remark And Signature by Checker
1	Progress of land acquisition	29. To check list of landowners 30. To check the result of discussion with landowners 31. To check the compensation condition for all landowners 32. To check the signature by landowners on the agreement for land title changes	☑Quarterly	☐Y / ☐N ☐Y / ☐N ☐Y / ☐N ☐Y / ☐N	Total percentage of progress, Issues and challenge 100 %
2	Progress of compensation payment status	15. To check compensation payment status based on discussion 16. To collect complain from PAPs through random Interviews with landowners	☐Quarterly	☐Y / ☐N ☐Y / ☐N	100 %
Total				Yes –, No –	

Source: JICA Survey Team

Form C-1: Monitoring Form during Construction Stage (Quarterly)

a) Monitoring Period From 01 April 2024

To 30 June 2024

S.N.	Items	Check Point	Frequency	Evaluation or Mitigation status Y:Good /Yes N: Poor /No	Remark And Signature by Checker
➢ Check that the Contractor is performing mitigation measures as following.					
1/5	Air pollution/ Noise and vibration	- Sprinkling water to bore land	☒ Quarterly	☒ Y / ☐ N	
		- Complain from surrounding communities	☒ Quarterly	☒ Y / ☐ N	
		- Adequate maintenance of construction vehicles and machines	☒ Quarterly	☒ Y / ☐ N	
		- Working time of construction machine	☒ Quarterly	☒ Y / ☐ N	
		- (To be added as necessary)	☐ Quarterly	☐ Y / ☐ N	
2/6	Water quality/Ecosystem	➢ Visual check to Palu River condition (Occurrence of Turbid water)	☒ Quarterly	☒ Y / ☐ N	
3	Waste management (Construction waste disposal)	➢ Check construction waste management plan (Waste collection and disposal plan) ➢ Check status of waste management plan	☒ Quarterly ☒ Quarterly	☒ Y / ☐ N	
		➢ Visual inspection in disposal site (number of bins)	☒ Quarterly	☒ Y / ☐ N	
4	Soil Contamination	➢ Check oil storage facilities	☒ Quarterly	☒ Y / ☐ N	
8	Poverty (Employee)	➢ Check number of local employees from surrounding communities (including PAP as resettlement)	☒ Quarterly	☒ Y / ☐ N	
9/-12	Existing social infrastructure and service/ Infectious disease and HIV/AIDS/ Occupational Health and Safety/Accident	➢ Check traffic management plan	☒ Quarterly	☒ Y / ☐ N	
		➢ Visual inspection of covering truck	☒ Quarterly	☒ Y / ☐ N	
		➢ Complain from surrounding communities	☒ Quarterly	☒ Y / ☐ N	
		➢ Check and visual inspection of present and management of Toilet	☒ Quarterly	☒ Y / ☐ N	
		➢ Hearing to local people about new infection statistic of HIV case	☒ Quarterly	☒ Y / ☐ N	

S.N.	Items	Check Point	Frequency	Evaluation or Mitigation status Y:Good /Yes N: Poor /No	Remark And Signature by Checker
		➢ Check implementation records of health awareness and monitoring for both of local people and construction workers.	☒ Quarterly	☒ Y / ☐ N	
		- Setting warning sign	☒ Quarterly	☒ Y / ☐ N	
		- Speed limit	☒ Quarterly	☒ Y / ☐ N	
		- Provisional use of safety gear	☒ Quarterly	☒ Y / ☐ N	
		- Awareness of occupational hazards	☒ Quarterly	☒ Y / ☐ N	
		- Safety procedure	☒ Quarterly	☒ Y / ☐ N	
Total				Yes 7 No 0	

Source: JICA Survey Team

S.N.	Items	Check Point	Frequency	Evaluation or Mitigation status Y:Good /Yes N: Poor /No	Remark And Signature by Checker
		➢ Check implementation records of health awareness and monitoring for both of local people and construction workers.	☒Quarterly	☒Y / ☐N	
		- Setting warning sign	☒Quarterly	☒Y / ☐N	Already installed.
		- Speed limit	☒Quarterly	☒Y / ☐N	Already installed.
		- Provisional use of safety gear	☒Quarterly	☒Y / ☐N	Safety gear is always worn.
		- Awareness of occupational hazards	☒Quarterly	☒Y / ☐N	Always reminded in the toolbox meeting
		- Safety procedure	☒Quarterly	☒Y / ☐N	Compliance with safety procedures.
Total				Yes 19, No 01	

Source: JICA Survey Team

01 April 2024 ~ 30 June 2024

Sample Monitoring Format for Land Acquisition

No	Explanation of the site (e.g. Area.no of resettlement HHs etc)	Status (Completed(date)/not complete)	Details (e.g. Site selection, identification of candidates sites, discussion with PAPs, Development of the site etc)	Expected Date of Completion
1	None	None	None	None
2				

No	Date	Place	Contents of the consultation/main comments and answers
1	None	None	None
2			
3			
4			

Resettlement Activities	Planned Total	Unit	Progress of Quantity			Progress in %		Expected Date of Completion	Responsible Organization
			During the quarter	Till the last quarter	Up to the quarter	Till the last quarter	Up to the quarter		
1.Progress of RCAP revision based on stakeholder meetings	None	None	None	None	None	None	None	None	None
Revision of RCAP			Date of finalization						
2.Finalization of PAPs List		**No.of PAPs**							
3.Progress of Compensation Payment		**No.of HHs**							
(7) Lot1		No.of HHs							
(8) Lot2		No.of HHs							
(9) XXX									
4. Progress of Land acquisition (All sites)									
(7) Lot1		Ha							
(8) Lot2		Ha							
(9) XXX									

Monitoring Record

Category	Social Environment Management
Frequency	Monthly
Date & Time	25 April 2024

Item	Monitoring Item	Monitoring Results	Information / Countermeasures
Existing Social Infrastructure and Service	Checking traffic management activities based on traffic management plan	☒ OK / ☐ Special note	Traffic management checkers are always performed based on a traffic management plan
	Visual inspection for covering truck	☒ OK / ☐ Special note	The tailgate cover is always attached
	Complaint from surrounding communities	☒ OK / ☐ Special note	No complaints from the surrounding community
Infectious Disease	Checking and visual inspection for present and management of toilet	☒ OK / ☐ Special note	Toilets are always cleaned every day

Any Other Remarkable Issues/Remarks
Reducing the amount of dust by doing street watering

Monitoring Record

Category	Social Environment Management
Frequency	Monthly
Date & Time	25 April 2024

Item	Monitoring Item	Monitoring Results	Information / Countermeasures
Occupational Health	Setting warning signs	☒ OK / ☐ Not OK	Already installed
	Speed limit signs	☒ OK / ☐ Not OK	Already installed
	Provisional use of safety gear	☒ OK / ☐ Not OK	Safety gear is always worn
	Awareness of occupational hazards	☒ OK / ☐ Not OK	Awareness of occupational hazards is always reminded in the toolbox meeting
	Safety procedure	☒ OK / ☐ Not OK	Compliance with safety procedures
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Emergency Risk
Frequency	Monthly / As necessary
Date & Time	25 April 2024

Item	Monitoring Item	Monitoring Results	Countermeasures / Information
Flood / Fire	Condition of equipment to be prepared based on the emergency response plan (Monthly)	☒ OK / ☐ Not OK	Inspection of the condition of emergency response equipment is carried out monthly
	Record of emergency case	☒ N/A / ☐ Special note	
	Training record	☒ N/A / ☐ Special note	Conducted on December 14, 2023
Earthquake	Hearing to the relevant authorities about applicable evacuation spot	☒ N/A / ☐ Special note	
	Updating evacuation procedure	☒ N/A / ☐ Special note	
	Evacuation training record	☒ N/A / ☐ Special note	Conducted on February 19, 2024 and reconducted on February 28, 2024.
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Waste
Frequency	Monthly
MM/YY	04/24

Date	Type of Waste *1		Qty	Unit	Generated from	Waste Management Activities	Note
01-04-24	A	Papper, plastic, bottle	87	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	147	Liters	Site (West & East)	Brough to public disposal	
04-04-24	A	Papper, plastic, bottle	174	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	294	Liters	Site (West & East)	Brough to public disposal	
19-04-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	147	Liters	Site (West & East)	Brough to public disposal	
22-04-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	294	Liters	Site (West & East)	Brough to public disposal	

*1 Classification of Waste

A: Human waste B: Surplus soil C: Scrap D: Wooden E: Chemical waste F: Recycle item G: Others (describe in detail)

Monitoring Record

Category	Waste
Frequency	Monthly
MM/YY	04/24

Date	Type of Waste *1		Qty	Unit	Generated from	Waste Management Activities	Note
26-04-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	

*1 Classification of Waste

A: Human waste B: Surplus soil C: Scrap D: Wooden E: Chemical waste F: Recycle item G: Others (describe in detail)

Monitoring Record

Category	Pollution Control
Frequency	As described
Date & Time	April 25, 2024

Item	Monitoring Item	Frequency	Monitoring Result Y: Good / Yes N: Poor / No	Countermeasures
Noise and Vibration	Visual checking for condition of construction work	Every 6 months	☒ Y / ☐ N	Conducted on November 13, 2023
	Noise threshold value	Every 6 months	☒ Y / ☐ N	Conducted on November 13, 2023
Physical Factor	Visual checking for condition of construction work	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
	Light intensity measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Chemical Factor	Clean air measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Fixed source (equipment) emissions	Visual checking for condition of construction work	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
	Emission gas measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Vehicle emissions	Visual checking for condition of construction work	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
	Emission gas measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Waste water	Visual checking for condition of construction work	Every 6 months	☒ Y / ☐ N	Conducted on November 13, 2023
	Waste water measurement	Every 6 months	☒ Y / ☐ N	Conducted on November 13, 2023
Ambient air (Air Quality)	Air quality measurement	Every 6 months	☒ Y / ☐ N	Conducted on November 13, 2023
Water quality	Checking water quality of Palu river.	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Biological Factor	Index diversity of plankton and benthos	Before / After Construction	☒ Y / ☐ N	Conducted on November 13, 2023

F.2 Environmental Monitoring Record

Monitoring Record

Category	Social Environment Management
Frequency	Quarterly
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Information
Infectious Disease	Hearing to local clinics and hospitals about new infection statistic and preventive measures	☒ None / ☐ Special note	
Occupational Health	Checking implementation record of health awareness and monitoring for both local people and construction workers	☒ None / ☐ Special note	
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Social Environment Management
Frequency	Monthly
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Information / Countermeasures
Existing Social Infrastructure and Service	Checking traffic management activities based on traffic management plan	☒ OK / ☐ Special note	Traffic management checkers are always performed based on a traffic management plan
	Visual inspection for covering truck	☒ OK / ☐ Special note	The tailgate cover is always attached
	Complaint from surrounding communities	☒ OK / ☐ Special note	No complaints from the surrounding community
Infectious Disease	Checking and visual inspection for present and management of toilet	☒ OK / ☐ Special note	Toilets are always cleaned every day
Any Other Remarkable Issues/Remarks Reducing the amount of dust by doing street watering			

Monitoring Record

Category	Social Environment Management
Frequency	Monthly
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Information / Countermeasures
Occupational Health	Setting warning signs	☒ OK / ☐ Not OK	Already installed
	Speed limit signs	☒ OK / ☐ Not OK	Already installed
	Provisional use of safety gear	☒ OK / ☐ Not OK	Safety gear is always worn
	Awareness of occupational hazards	☒ OK / ☐ Not OK	Awareness of occupational hazards is always reminded in the toolbox meeting
	Safety procedure	☒ OK / ☐ Not OK	Compliance with safety procedures
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Emergency Risk
Frequency	Monthly / As necessary
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Countermeasures / Information
Flood / Fire	Condition of equipment to be prepared based on the emergency response plan (Monthly)	☒ OK / ☐ Not OK	Inspection of the condition of emergency response equipment is carried out monthly
	Record of emergency case	☒ N/A / ☐ Special note	
	Training record	☒ N/A / ☐ Special note	Conducted on December 14, 2023
Earthquake	Hearing to the relevant authorities about applicable evacuation spot	☒ N/A / ☐ Special note	
	Updating evacuation procedure	☒ N/A / ☐ Special note	
	Evacuation training record	☒ N/A / ☐ Special note	Conducted on February 19, 2024 and reconducted on February 28, 2024.
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Waste
Frequency	Monthly
MM/YY	05/24

Date	Type of Waste *1		Qty	Unit	Generated from	Waste Management Activities	Note
01-05-24	A	Papper, plastic, bottle	87	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	147	Liters	Site (West & East)	Brough to public disposal	
06-05-24	A	Papper, plastic, bottle	435	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	735	Liters	Site (West & East)	Brough to public disposal	
09-04-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	441	Liters	Site (West & East)	Brough to public disposal	
13-04-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	

*1 Classification of Waste

A: Human waste B: Surplus soil C: Scrap D: Wooden E: Chemical waste F: Recycle item G: Others (describe in detail)

Monitoring Record

Category	Waste
Frequency	Monthly
MM/YY	05/24

Date	Type of Waste *1		Qty	Unit	Generated from	Waste Management Activities	Note
16-05-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	441	Liters	Site (West & East)	Brough to public disposal	
20-05-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	
24-05-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	
27-05-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	441	Liters	Site (West & East)	Brough to public disposal	

*1 Classification of Waste

A: Human waste B: Surplus soil C: Scrap D: Wooden E: Chemical waste F: Recycle item G: Others (describe in detail)

Monitoring Record

Category	Pollution Control
Frequency	As described
Date & Time	May 27th, 2024

Item	Monitoring Item	Frequency	Monitoring Result Y: Good / Yes N: Poor / No	Countermeasures
Noise and Vibration	Visual checking for condition of construction work	Every 6 months	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
	Noise threshold value	Every 6 months	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
Physical Factor	Visual checking for condition of construction work	Every 1 year	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
	Light intensity measurement	Every 1 year	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
Chemical Factor	Clean air measurement	Every 1 year	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
Fixed source (equipment) emissions	Visual checking for condition of construction work	Every 1 year	☐ Y / ☐ N	Conducted on November 13, 2023
	Emission gas measurement	Every 1 year	☐ Y / ☐ N	Conducted on November 13, 2023
Vehicle emissions	Visual checking for condition of construction work	Every 1 year	☐ Y / ☐ N	Conducted on November 13, 2023
	Emission gas measurement	Every 1 year	☐ Y / ☐ N	Conducted on November 13, 2023
Waste water	Visual checking for condition of construction work	Every 6 months	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
	Waste water measurement	Every 6 months	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
Ambient air (Air Quality)	Air quality measurement	Every 6 months	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
Water quality	Checking water quality of Palu river.	Every 1 year	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21
Biological Factor	Index diversity of plankton and benthos	Before / After Construction	☐ Y / ☐ N	Conducted on May 21, 2024 Test results to be obtained on June 21

Monitoring Record

Category	Social Environment Management
Frequency	Monthly
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Information / Countermeasures
Existing Social Infrastructure and Service	Checking traffic management activities based on traffic management plan	☒ OK / ☐ Special note	Traffic management checkers are always performed based on a traffic management plan
	Visual inspection for covering truck	☒ OK / ☐ Special note	The tailgate cover is always attached
	Complaint from surrounding communities	☒ OK / ☐ Special note	No complaints from the surrounding community
Infectious Disease	Checking and visual inspection for present and management of toilet	☒ OK / ☐ Special note	Toilets are always cleaned every day
Any Other Remarkable Issues/Remarks Reducing the amount of dust by doing street watering			

Monitoring Record

Category	Social Environment Management
Frequency	Monthly
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Information / Countermeasures
Occupational Health	Setting warning signs	☒ OK / ☐ Not OK	Already installed
	Speed limit signs	☒ OK / ☐ Not OK	Already installed
	Provisional use of safety gear	☒ OK / ☐ Not OK	Safety gear is always worn
	Awareness of occupational hazards	☒ OK / ☐ Not OK	Awareness of occupational hazards is always reminded in the toolbox meeting
	Safety procedure	☒ OK / ☐ Not OK	Compliance with safety procedures
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Emergency Risk
Frequency	Monthly / As necessary
Date & Time	May 27th, 2024

Item	Monitoring Item	Monitoring Results	Countermeasures / Information
Flood / Fire	Condition of equipment to be prepared based on the emergency response plan (Monthly)	☒ OK / ☐ Not OK	Inspection of the condition of emergency response equipment is carried out monthly
	Record of emergency case	☒ N/A / ☐ Special note	
	Training record	☒ N/A / ☐ Special note	Conducted on December 14, 2023
Earthquake	Hearing to the relevant authorities about applicable evacuation spot	☒ N/A / ☐ Special note	
	Updating evacuation procedure	☒ N/A / ☐ Special note	
	Evacuation training record	☒ N/A / ☐ Special note	Conducted on February 19, 2024 and reconducted on February 28, 2024.
Any Other Remarkable Issues/Remarks			

Monitoring Record

Category	Waste
Frequency	Monthly
MM/YY	06/27

Date	Type of Waste *1		Qty	Unit	Generated from	Waste Management Activities	Note
03-06-24	A	Papper, plastic, bottle	393	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	147	Liters	Site (West & East)	Brough to public disposal	
07-06-24	A	Papper, plastic, bottle	636	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	
10-06-24	A	Papper, plastic, bottle	351	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	441	Liters	Site (West & East)	Brough to public disposal	
14-06-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	

*1 Classification of Waste

A: Human waste B: Surplus soil C: Scrap D: Wooden E: Chemical waste F: Recycle item G: Others (describe in detail)

Monitoring Record

Category	Waste
Frequency	Monthly
MM/YY	06/26

Date	Type of Waste *1		Qty	Unit	Generated from	Waste Management Activities	Note
17-06-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	441	Liters	Site (West & East)	Brough to public disposal	
21-06-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	
24-06-24	A	Papper, plastic, bottle	348	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	588	Liters	Site (West & East)	Brough to public disposal	
28-06-24	A	Papper, plastic, bottle	261	Liters	Office	Brough to public disposal	
	A	Papper, plastic, bottle	441	Liters	Site (West & East)	Brough to public disposal	

*1 Classification of Waste

A: Human waste B: Surplus soil C: Scrap D: Wooden E: Chemical waste F: Recycle item G: Others (describe in detail)

Monitoring Record

Category	Pollution Control
Frequency	As described
Date & Time	June 25th, 2024

Item	Monitoring Item	Frequency	Monitoring Result Y: Good / Yes N: Poor / No	Countermeasures
Noise and Vibration	Visual checking for condition of construction work	Every 6 months	☒ Y / ☐ N	Conducted on May 21, 2024
	Noise threshold value	Every 6 months	☒ Y / ☐ N	Conducted on May 21, 2024
Physical Factor	Visual checking for condition of construction work	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
	Light intensity measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Chemical Factor	Clean air measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Fixed source (equipment) emissions	Visual checking for condition of construction work	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
	Emission gas measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Vehicle emissions	Visual checking for condition of construction work	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
	Emission gas measurement	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Waste water	Visual checking for condition of construction work	Every 6 months	☒ Y / ☐ N	Conducted on May 21, 2024
	Waste water measurement	Every 6 months	☒ Y / ☐ N	Conducted on May 21, 2024
Ambient air (Air Quality)	Air quality measurement	Every 6 months	☒ Y / ☐ N	Conducted on May 21, 2024
Water quality	Checking water quality of Palu river.	Every 1 year	☒ Y / ☐ N	Conducted on November 13, 2023
Biological Factor	Index diversity of plankton and benthos	Before / After Construction	☒ Y / ☐ N	Conducted on November 13, 2023