To:
Mr. Léo Heller
Special Rapporteur on the Human Rights to Safe Drinking Water and Sanitation
Sustainable Human Development Section
Special Procedures Division
UNOG-OHCHR
Palais des Nations
CH-1211 Geneva 10, Switzerland

Dear Mr. Heller,

Re: Questionnaire Concerning The Special Rapporteur’s Thematic Report on the Impact of Mega-Projects on the Human Right to Water and Sanitation

1. Pursuant to the receipt of the above-mentioned questionnaire, the State of Israel respectfully submits its replies.

2. The issue of the supply of water and sewage services at an adequate level of service and to the general population is reflected in the master plan of the Water Authority presented below (emphasis added).

3. Vision:
Water is a basic existential commodity for both human survival and for the environment. The national water industry constitutes a strategic infrastructure
of the State of Israel and a crucial factor in its development and the realization of its national goals as a Jewish and democratic state; including the development and preservation of agriculture, habitation, land conservation, the strengthening of the periphery and the economic development of the country. Sustainable management and development of the water industry will be carried out professionally, efficiently, fairly and transparently, and according to advanced standards, to promote public welfare and health. The natural water sources will be rehabilitated and preserved. The Israeli water industry will serve as a global knowledge center for water resources management technologies under conditions of scarcity and innovation in the water professions.

4. **Predominant goal:**

To ensure the supply of water, the provision of sewage services, the designation of effluent and the management of runoff and drainage in adequate quality, quantity and reliability, and with economic efficiency for the development of the State and the realization of its national goals, to achieve the sustainable welfare of all consumers.

5. The plan was approved in August 2012 by the Water Authority Council and is published on the Water Authority's website, where a version in English can also be found (please see: http://www.water.gov.il/Hebrew/Planning-and-Development/Planning/MasterPlan/DocLib4/Water_Sector_Master_Plan.pdf).

6. The vision of the water industry includes the reference to fair development of the water industry, the establishment of advanced criteria in the development process, the raising of public profits and the protection of health. It is also possible to see the commitment to rehabilitate and conserve natural water sources and to conduct sustainable management. The industry's predominant goal includes ensuring the supply of water and providing sewage services for the promotion of sustainable welfare of all residents.

7. Parallel to the Master Plan, long-term regional plans and topical plans are going forward, fulfilling the vision through the development of supply and transmission systems.

8. Under these statements, the Water Authority has worked over the years to develop facilities for the production and supply of water and facilities for the
collection and treatment of sewage throughout the country. The scope of Mekorot's\(^1\) annual development stands at close to 1 billion NIS (279,615,000 USD) annually and is expected to grow significantly, when the majority of the investment is in the development of the water plants required to ensure regular supply to communities throughout the country, to connect the new desalination plants to the water network, and to connect the Sea of Galilee area to the new water sources – the desalination facilities on the coast.

9. The matter of ensuring the entire public access to water services is expressed in the State of Israel in a manner not common in the various countries, in the form of the founding provisions of the Water Law 5719 – 1959, which states that water is the property of the entire public and the State manages water resources for the benefit of the residents of the country. In other words, no person has priority right to water and when the State makes decisions regarding the management of the water sources, there is freedom of operation to ensure the rights of the general public to access and use of this vital resource.

10. Another aspect of the management of the water industry in the State of Israel, which makes it possible to promote the entire public's access to the essential resource of water and sanitation services, is the Government's decision to finance the development of the water and sewage industry through water and sewage tariffs. This allows for a certain degree of freedom of operation when decisions are made regarding the continued development of the industry.

11. Note that the Water Law 5719 – 1959 also addresses nature's right to water and the obligation to preserve nature and landscape values, which also increases the accessibility of the public to the resource of water in their natural form.

**GENERAL**

12. In the state of Israel vital projects for the water economy and for handling with drought are being promoted. The cost of their performance in the next seven years is estimated at approximately 14 billion NIS (3,914,610,000 USD).

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\(^1\) Mekorot is a wholly government owned company, under the purview of the Ministry of Energy and Water and the Ministry of Finance. Mekorot was defined in the Water Law 5719 – 1959 as the National Water Company and it is accountable to the Water Authority – the regulator that supervises Mekorot’s activities on behalf of the State.
13. Following the continuous drought befalling the Israeli water economy, and aiming to stop the natural water resources from continuing to dwindle, the Israeli Government decided to approve an urgent plan for dealing with the severe water crisis in the economy (Government Resolution No. 3866 from 10.06.2018).

14. The plan includes, *inter alia*, the following components: increasing the supply of desalinated water; connecting disconnected areas to the national system; reinforcing the water supply for the Kineret Lake from the national system, in order to keep the Kineret as a strategic water resource in the water economy; performing the plan for reclamation of seven rivers in Northern Israel.

**The Desalination System of the State of Israel**

**Background and Preparation of the National Outline Plan**

15. In the State of Israel there are five working facilities of seawater desalination. These facilities work according to reversed osmose method, and they supply excellent quality water to the national water system. Today, they desalinate about 580 million cubic meters a year.

16. In the year 2014, the Government approved NOP (National Outline Plan) 2/2/b/34 for desalination sites part of which was already established pursuant to NOP 2/b/34. Some of the desalination facilities were established by virtue of NOPs and some by virtue of NIP (National Infrastructure Plan 36). The plan saved areas for planning of desalination facilities to be planned in a detailed scheme according to its provisions. A comprehensive planning proceeding was initiated with an order to make the NOP. The composition of the Editors Committee includes representatives of the Planning Administration, the Water Authority, the Ministry of Health and the Ministry of Environmental Protection and the Nature and Parks Authority as observers. Between the years 2009-2012, about 25 meetings of the Editors Committee took place; the subject was discussed several times at the Sub-Committee for Principle Planning Issues and at the National Council. The plan was delievered for the comments of the district committees and the comments were proclaimed before an investigator who submitted a report regarding them.

17. The work of the Editors Committee included a proceeding of public involvement, as part of which meetings were held with stakeholders, focus
groups and questionnaires on the website of the Water Authority. Additionally, the plan was presented in several professional conferences in areas related to the plan, in order to inform the public about the plan preparation, to give the public an opportunity to respond and comment and to create a public discussion. The representatives of the planning team took part in the discussions and took into consideration the public's comments in order to implement them in the future work of the team.

18. The goal of the plan is to determine areas for desalination facilities, for reserves, for strips of planning for water pipeline, for the ancillary infrastructure facilities and for engineering facilities, as well as to provide directions for their establishment.

19. The forecasted required desalination scope for the target year (2050) is 1,750 million cubic meters a year.

20. The planning conception of NOP 2/2/b/34 is based on establishment of large sites for seawater desalination (in a desalination scope of 150 million cubic meters a year and more). The sites are geographically spread over four spaces, in accordance with the spatial distribution of the Water Authority: the Northern Region, HaSharon Region, the Central Region and the Southern Region.

**A plan for Soreq B Desalination Facility**

21. NIP/36 "Soreq Desalination Facility" was approved on July 29th, 2010. The plan fixed a planning framework for establishment of a desalination facility and ancillary settings with an output of about 300 million cubic meters a year.

22. The first part of the project – Soreq A Desalination Facility – has already been executed. The facility works in a scope of 150 million cubic meters a year, and it discharges desalinated water to the national system since 2013.

23. In order to deal with the dwindling of the natural water resources, there is a need to establish Soreq B Desalination Facility – this facility is the only facility which is statutorily available for performance.

24. Within an environmental impact statement, it was said that there is an option to increase the facility's output by approximately 30%, based on existing infrastructures and/or EDM (Energy Demand Management) (a meter of Israel Electric Corporation [IEC] which determines the power tariff in accordance
with the system's load and the power utilization time). Therefore, it was decided that the output in Soreq B Desalination Facility will be 200 million cubic meters a year.

25. Upon the provision of building permits, the franchiser will be required, pursuant to the provisions of the plan, to conduct comprehensive environmental tests and to obtain the approval of the committee and other entities.

A plan for Establishment of Desalination Facility in the Western Galilee (Status: Under Planning)

26. There is a plan for desalination facility, which will desalinate 200 million cubic meters a year at least (in two stages), and will provide an instant solution for the needs of the water economy in general and of the Western Galilee in particular (it should be mentioned, that all desalination facilities that currently exist are located from Hadera region and southwardly, and the absence of water supply sources in the north might harm the Western Galilee region, both the farmers and the ability to develop new residential neighborhoods).

27. The project was initially included within the NOP for desalination sites, 2/2/b/34, however due to the urgency it was decided to promote it separately within NOP 3/2/b/34.

28. Due to conflicts that have arisen regarding its location, it was decided in 2017 to proceed with its promotion as part of the NIC (the National Infrastructures Committee, the Planning Administration).

29. The plan was submitted after holding a multi-participants "congress", discussion at the committee pursuant to articles 77-78 to the Law, as well as many meetings of the entrepreneur with the NIC team and with relevant external entities (the meeting took place on February 4th, 2018 in addition to the mandatory statutory procedures, and therein the water authority presented the different alternatives – the potential sites for the facility establishment).

30. Note that different alternatives were examined, which were offered to the facility's location according to criteria of wall proximity to industry or to other facilities, distance from residence and sensitive usages, the extent of harm to the area and its landscape-ecologic sensitivity, land pollution, prevention of blocking the sea view, distance of the pipeline to the sea and land availability.
31. The desalination facility itself includes two separate desalination facilities, each one with an area of about 50 dunam, which can produce at least 100 million cubic meters of water a year each. The plan allows the establishment of each phase separately.

**Recovery of Water to the Rivers and to the Kineret Lake**

"Water to Nature" Master Plan

32. The "Water to Nature" plan was led by the Water Authority, the Environmental Protection Ministry and the Nature and Parks Authority. This plan is a derivative of the national master plan for the water economy, and it is aimed to recover water to the nature, in order to reclaim and restore the ecologic systems previously existed.

33. The plan's principles are as follows:

- The condition of water in nature (quantity and quality) will be reclaimed as a dependency on the condition of the accumulator in the water economy and the condition of precipitation in that year.
- Reclamation and preservation of the quantity and quality of the natural water resources, as part of the recovery of the ecologic system as a whole, in order to enable hydrological flowing and streaming in quality and quantity which are appropriate for the ecologic system.
- In situations of failure and non-utilization of drain water – it is required to consider that humid bodies of water (rivers, swamps, winter pools, lakes) are the most sensitive ecologic systems.

**Routing of Water in the National Water Conduit Northwardly**

34. In view of the decrease in the water quantities supplied from the Kineret, it was resolved to channel the water in the national water conduit from Rosh Ha'Ayin to Eshkol. The discharge of water northwardly from the desalination facilities in the center to northern Israel is also for the purposes of supplying water for refilling of the Kineret.

**Shafdan Facility for Wastewater Purifying**

35. The Dan Region Wastewater Treatment Plant (Shafdan) is a complex inter-regional system that collects, treats and reclaims municipal wastewater. Igudan Environmental Infrastructure's principal collection and carrier systems are comprised of deep sewerage lines, which are connected to the sewerage lines
of the various municipalities. The total length of the principal and secondary carriers is reflected by approximately 100 km of pipeline that ranges in diameter from 60 cm to 2.2 m. The plant's principal carrier system for transporting raw wastewater begins at the Reading Pumping Station in north Tel Aviv-Jaffa, continues along the Tel Aviv shoreline until reaching the Bessa Pumping Station at the entrance to Jaffa, and from there through Bat Yam to the treatment facility at Soreq.

36. In February 1987, the first phase of the plant was activated, whereas only the wastewater of Holon, Bat-Yam, Rishon LeZion and Southern Tel Aviv-Jaffa were transferred to biological treatment at circulated facultative oxidation ponds, at Soreq site, in a quantity of about 20 million cubic meters a year (Stage A). In March 1996, the facilities were installed at the plant and Stage B was activated as well. Since then, the plant has treated all wastewater of Dan Metropolitan Region, a quantity of about 120 million cubic meters a year and the wastewater are no longer discharged to the Mediterranean Sea.

37. Shafdan Facility's main goals are as follows:
   a) To minimize environmental pollution and avoid health risks by constructing a sewage collector and disposal system.
   b) To prevent the discharge of raw sewage into rivers and the sea.
   c) To contribute towards protecting and preserving the state's dwindling water resources through appropriate treatment of sewage water for purposes of its reuse. The reclaimed water is supplied for agricultural use following further treatment in the ground-aquifer system (SAT) operated by Mekorot.

38. Purification of the wastewater is performed through natural biological processes that bring about the removal and decomposition of organic materials in the water.

39. Nowadays, in view of the forecasted population growth and the establishment of further residential units in the Central Region, there is a need to expand the scope of wastewater treatment. Given that, the following actions are promoted:
   - Establishment of industrial wastewater purification facility (in collaboration with the European Union)
   - Upgrading the sites of drain water penetration
Establishment of sewerage carriers for Shafdan

**Water Supply for the West Bank and the neighboring Jordan**

40. These days, six plans for reinforcement of water supply in the West Bank in addition to several regional plans, in a total cost of 951.2 million NIS (265,907,960 USD), are promoted. The plans include:

- 20 pumping stations, most of them are intended to increase the existing stations, and only some of them are intended to be new stations.
- 60 water supply lines in a total length of 170 km.
- 8 water pools.
- 1 drinking water drilling, to a depth of 750 meter and a planned flow of 250 cubic meters per hour.

**Water Supply for Jordan – KBS (Kineret-Beit She'an) Line**

41. Kineret-Beit She'an (KBS) Water Plant was founded in the early 1960's and it was used to supply water to the agricultural areas of the neighboring settlements. Unlike its original designation, in recent years this system is also used to transfer water to the Hashemite Kingdom of Jordan, as part of the peace treaty with Jordan.

42. Today there is an intention to increase the quantity of water flowing in the water line, to approximately 71.4 million cubic meters per year, out of which about 65 million cubic meters will be supplied to Jordan. Thus, in fact, the water supply to Jordan, which currently faces a severe water crisis, will be reinforced. The planning and placement of the line are in conformity with the obligation of the Israeli Government in the agreements with the Hashemite Kingdom – to double the supply of raw water for drinking which are transferred from the Kineret, to 100 million cubic meters a year.

43. Israel's actions aimed at connecting disconnected areas to the national network increase the reliability of the water supply and their availability to all consumers. Drain water are cheaper than drinking water, what makes it easier for the farmers to proceed with their agricultural work.

44. It should be emphasized, that in all the important projects mentioned above, the public and the affected population were involved, as is evident from the
national infrastructure plan, public conferences concerning the projects, legal procedures relating to the projects and media coverage.

**MACRO PLANNING STAGE**

45. The planning procedures in the State of Israel are regulated in the provisions of the *Planning and Building Law*. The law includes detailed instructions regarding the public's ability to take part in the planning process. It is proposed that this matter be discussed with the Planning Administration, which is responsible for the law and its implementation.

46. In addition, the National Outline Plan NOP 34, the National Outline Plan for the Water Industry (Sewage), established a number of central provisions in 2003 that guarantee the provision of sanitation services throughout the country.

47. Section 10 of this plan determined the duty of each district planning committee to establish a sewage advisory committee, which accompanies the sewage aspects and provides professional advice regarding the various programs being handled in the district. The committee is composed of representatives of the regulatory ministries that have a bearing on the issue of sewage treatment and is a central professional address for the accompaniment of the ongoing procedures and for ensuring proper sewage maintenance for the benefit of all residents of the country.

48. Another important provision in NOP 34 is the stipulation that it is forbidden to approve a local or detailed plan in a locality if the construction proposed in the plan does not have a solution for the treatment of sewage by means of a wastewater treatment facility. Indeed, this provision is an important catalyst in promoting the establishment of sewage treatment facilities throughout the country and is a means of ensuring sanitation services for the entire population of the country.

49. As for transparency towards the public, development procedures are carried out according to the provisions of the *Planning and Building Law*, which also include a detailed provision regarding public participation in the planning process. In addition, the aid procedures for receipt of subsidies are public and known to the sewage and water service providers, enabling them to take advantage of the subsidies available to them and to promote development.
50. Another aspect that can be pointed out at the macro-planning stage of mega projects for seawater desalination is the issue of infrastructure location, in a way that minimizes the harm to nature and landscape and the public's access to the public resources of the beaches. Thus, for example, in the decision of the National Council on the preparation of a new National Outline Plan for desalination facilities, it was stated that the infrastructure must be adjacent to existing infrastructures. During the planning of the pipeline, the use of existing infrastructure corridors should be sought and the facilities should be placed in such a way as to reduce the damage to the marine and coastal environment.

PLANNING AND DESIGN STAGE

51. The water and sewage infrastructure development plans of the water and sewage corporations, which currently provide services to about 90% of the population, are supervised and approved by a professional government agency in the Water Authority. The judgment of these programs is done jointly with the Ministries of Health, Environment, Housing and others. This process ensures that the development issue will be examined from all the relevant perspectives. The plans for implementation go through the planning procedures set out in the law, which also include detailed hearings.

52. The matter of promoting the right to adequate water and sanitation services was the basis for several government resolutions on providing support to disadvantaged populations. Some resolutions allocate financial resources only to localities where these services are not sufficiently developed.

LICENSING AND APPROVAL STAGE

53. The licensing and approval procedures are mainly procedures under the Planning and Building Law 5725-1965.

54. From the legal aspect relating to the water industry in particular, it should be noted that the Water and Sewage Corporations Law, which currently regulates the activities of the main suppliers of water and sewage services, establishes as a basic obligation the supplier's responsibility to provide water and sewage services to all consumers in its area without discrimination.

CONSTRUCTION STAGE, SHORT-TERM ACTIVITY AND LONG-TERM ACTIVITY

55. As explained above, mega projects in the water and sewage industry are intended to ensure the improvement of water and sewage services for the
population. In the event that in the process of development and construction, such a project threatens the supply of services, the issue is raised and addressed during the planning stages and/or in the stages of coordination of the infrastructure, while there is no disruption in the provision of the essential services.

56. In cases where mega projects from other areas may disrupt the supply of services during the construction phase or after its completion, the supplier of these services is obliged, by virtue of the provisions of the Water and Sewage Corporations Law 5761-2001, the service standards and the guidelines on water security, to ensure continuity of service. This, in addition to dealing with the matter within the framework of the outline plan or the building permits as required (for example, the provisions of a plan requiring the relocation of a sewage line or a water line in the area of the plan before moving forward with the new development). If necessary, the Water Authority is required to do so within the framework of its functions. An example of this was raised during the development of the new Highway 31 in the Negev area. The road's route disrupted the access of families in the Bedouin diaspora to their supply points. The issue did not come up at the planning stage, since this pertains to illegal construction, for which normative supply was not regulated. When this issue became clear at the time of construction of the road, the Water Authority instructed Mekorot to locate alternate supply points for these families and the matter was settled.

57. The obligation to supply the services without discrimination is also provided in the Local Authorities (Sewage) Law 5722 – 1962 and with regard to water services, in the Water Law 5719 – 1959.

58. In cases where mega projects threaten the provision of water and sewage services, those affected have the legal tools determined in the planning processes, as well as additional remedies of turning to the courts and, in appropriate cases, to the Water Authority, which will regulate the provision of the services.

**EX-POST EVALUATIONS**

59. The development processes accompanying the Water Authority include a continuous process of study and lessons learning, which includes an
improvement in the policy rules that guide decisions regarding the provision of services. An example of this can be seen in the policy of the Sewage Infrastructure Development Administration, which is currently promoting a policy to unite sewage treatment plants and shut down small facilities that use land areas and may create environmental hazards.