Chapter 8
Israel: The Evolution of Water Law and Policy

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Abstract Israel's water law and its administration warrants scrutiny for its exceptional foresight, depth, and flexibility. The State of Israel was created in 1948 and a decade later the parliament (Knesset) passed four water laws that cover all aspects of water use and reuse. The laws' motif is that water is a national resource, owned by the people and held in trust by the Government for the benefit of the people. This type of legislation could not be passed today as paternalistic approaches have given way to a focus on individual rights and responsibilities. While privatization and long-term planning have changed water administration, the basic legislative infrastructure remains in place today as a comprehensive code worthy of study and imitation.

Keywords Israel • Middle East • water • water law • water policy

8.1 The Legal Inheritance

The land of Israel has been governed throughout recorded history by continuously changing governments and rulers. Each regime applied water law principles customary to their system (see Chapter 4, Laster et al. and Chapter 2, Kornfeld, this book). This chapter covers the period from the beginning of the British Mandate in 1917 until today. The Mandate did not make a complete break from the past. The British Mandate Government enacted the Palestine Order-in-Council in 1922, keeping Ottoman law in force unless modified by enactments of the British High

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J.W. Dellapenna and J. Gupta (eds.), *The Evolution of the Law and Politics of Water,*

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Commissioner, the King of England, or the British Parliament. The newly formed legislature of Israel enacted similar legislation in 1948, the Law and Administration Ordinance that declared that the laws existing in Palestine continue in force, subject to enactments of the new legislature and subject 'to such modifications as may result from the establishment of the State and its authorities' (§11). These two laws embedded Ottoman Law and British Common Law in the roots of Israel's water laws.

8.1.1 The Mejelle

The *Mejelle*—the Civil Code of the Ottoman Empire enacted in 1858—declared that water, like grass and fire, was a free good, jointly owned by the public (§1234). No one may obtain private possession of groundwater (§1235), lakes, the seas (§1237), and large rivers (§1238). Use of such waters for irrigation and drinking is allowed to all (§§1264–1266), provided no injury is committed to another user (§1265). A river (§1239) or well (*Hussein v. Mour'I* 1934) found entirely within the boundaries of one or several landowners belongs to those landowners giving them the right to restrict its use. Yet this right does not bar the creation of an easement to use (§1268), nor does it extend to the groundwater itself. The *Mejelle* permits anyone to dig a well and withdraw water for his or her needs, even if such withdrawal lowers the water table in a neighbour's well (§1268). Further, the *Mejelle* provides that ownership of a well carries with it ownership of the surrounding land (§§1281, 1286).

The *Mejelle* does not allow an easement to pollute and forbids the construction of a cesspit or sewer near a well or water channel, which may contaminate its waters. On failure to remove the injury, the cesspit or sewer are to be closed (§§1212, 1224). There are no provisions for rerouting the sewage in case of closure, however, nor does the section apply to all contamination of natural bodies of surface water. The State must clean public rivers (§1321) and landowners must clean private streams (§1322). This latter section also defines the order of payment among appropriators for cleaning the stream's waters. It apparently refers to the removal of debris from wadis, however, and not to the building of sewage purification plants.

8.1.2 British Mandate Law

The League of Nations created the British Mandate in 1922, proclaiming that the Government 'shall have full power to provide for public ownership or control of any of the natural resources of the country…' (Palestine Mandate Resolution 1922: art. 11). In order to emphasize this point and compensate for Ottoman failure to establish a beneficial and effective administrative framework, the Mandate Government passed the 1940 Amendment to the Palestine Order in Council of 1922 that vested national surfaces water in the Government (Shaw 1946, I: 391). The Amendment and follow-up regulations severed all private rights in surface

water and conferred power on the Water Commissioner to restrict rights of use in all water sources in controlled areas (art. 16E).

Subsequently, three laws were drafted to control drainage, water rights, the use of surface water, and to enable the Government to study and control underground water resources respectively. The last two bills faced opposition from the Yishuv, the Jewish community in Palestine, who aborted any attempt by the Mandate Government to control the water supply, especially to agriculture (Shaw 1946, I: 392–97). The Government was successful in enacting legislation on water supply for non-agricultural usage. The Safeguarding of Public Water Supplies Ordinances No. 17/1937 and No.20/1938 enabled the Government to control water resources and ensure adequate water supply for domestic use, and to restrict the construction of wells or other operations likely to interfere with a public water supply without a license. Under the Safeguarding of Public Water Supplies Ordinance No. 20/1938, the Government assumed the power to drill on private land in order to conduct hydrological surveys. In the event of the discovery of water, the High Commissioner may expropriate the land containing the borehole. Subsequent surveys revealing serious problems of groundwater salinity due to over extraction were ignored (Shaw 1946, I: 395). Water quality provisions for purification of water at the supply stage are included in the Public Health Ordinance of 1940, still in effect today.

English expertise on drainage control and flood prevention is reflected in the 1941 Flooding and Soil Erosion (Prevention) Ordinance (Kendal and Baruth 1949: 14). This authorized the declaration of special areas, within which authorities could regulate farming and grazing (including banning them), forbid the cutting or burning of plants, and carry out related work projects. In 1942, the Drainage (Surface Water) Ordinance was adopted to create the position of a Water Commissioner to 'construct, maintain and control drainage works within any part of Palestine…' The Act enabled the Water Commissioner to prepare and execute drainage schemes, and to remove all obstacles to drainage work.

Municipalities were required to provide drinking water sewage and drainage services under the Municipal Corporations (Sewerage, Drainage and Water) Ordinance of 1936, but only upon request by the High Commissioner. The Cities Building Ordinance of 1935 required the municipal authority to plan for sewerage, drainage and drinking water for its residents. In small towns or rural communities, the Public Health Ordinance of 1940 gave the District Commissioner the power to require a village authority to provide and maintain drainage and water supply services sufficient for public and private purposes (¶64). Disposal of sewage was a local affair, partially supervised by the central Department of Health and the District Governors. Reference to sewage disposal works in the ordinances implied only the location of a sewage outfall, without any provisions for the purification of sewage. By this approach, towns were encouraged to convert streams and wadis into carriers of waste. The only ordinance that directly aimed at pollution prevention is the Criminal Code Ordinance (1936), which prohibits the intentional fouling of a spring, stream, well, or reservoir on pain of imprisonment of up to 3 years (§198). In addition, the Public Health Ordinance requires the abatement of nuisances in water sources that may be injurious or dangerous to the public health (§§53–64). Both ordinances are still in effect today.

British judges in the Mandate used English common law and riparian rights as much as Ottoman law to decide cases. Disputes over water rights were brought before Land Courts because under the common law water rights are linked to land ownership (*Mutawalli Shazletti Waqf v. Municipal Council of Acre* 1940). Depletion of a water source, or damage caused by diversion of surface waters, was considered as nuisance, justiciable in the District Courts (*Aashsash v. Scheller* 1932).

8.1.3 The Early Years of Statehood

Before independence, an ideological movement gathered momentum amongst the Jews in Palestine and Zionists living in the Diaspora, proclaiming the importance of a strong working class, including a return of the Jews to working the land. They later formed the Labour Party, which ruled continuously from 1948 to 1977 and intermittently in later years. Agriculture-based settlements, called *kibbutzim*, sprang up throughout the country. The *kibbutzim* played a major role in the young economy, providing jobs, food, and foreign currency. Part of the ideology of return to the land included making the desert bloom, by using novel farming and irrigation methods to increase arable land and developing numerous desert forestation projects. At the same time, a strong centralized government-in waiting led by David Ben Gurion included government-owned industries and a national labour union (*Histadrut*) with open membership. The *Histadrut* provided health and social services to the workers, created an agriculture marketing cooperative, a bank, and a large construction company. Between 1948 and 1952, 687,000 immigrants arrived, doubling the Jewish population and making the centralized economy essential for providing homes and jobs.

The State's legal inheritance, the *Mejelle* as incorporated by the British Mandate, gave the new government of Israel a free hand to set water policy without the encumbrance of private rights in water. Agriculture, with its almost mythic control over the new government's economy and ideology, served as the lynch pin for government water policy, and a propensity for strong central government control over the economy found its imprint in water legislation. Converging, these historical factors laid the basis for Israel's water policy for generations—with government controlling the country's water resources exercised through the Ministry of Agriculture.

8.2 The Modern Legislative Framework

Between 1955 and 1959 four water laws were enacted. These laws maintained the spirit of the *Mejelle* by affirming the universal right to water, while incorporating central control and supervision of water sources, as the British Mandate authorities had advocated. All four laws are still in effect today.

The Water Measuring Law of 1955 declares that no water may be distributed in Israel without first being measured. Although the law initially recognized private rights in a water source (subsequently abrogated by the Water Law of 1959), the Ministry of Agriculture was empowered to require the measurement of water consumed from an independent source (§4). A regulation under this law requires abstractors to file monthly reports on water consumed or supplied with the Water Commission.

The Water Drilling Control Law of 1955 provided that no wells may be drilled and no water abstracted unless by government permit (§4). The law empowers the Water Commissioner to refuse a license request if a new well will harm groundwater, or interfere with household water supply (§5). The law empowers a magistrate court judge to close any well dug without license from the Water Commissioner (§11a).

The Drainage and Flood Control Law (1957) created a national drainage board and regional drainage boards. The former advises the Minister of Agriculture responsible for execution of the law and approving regional drainage plans. The latter are independent bodies, comprised of representatives of local and national government, entrusted with the power to prevent soil erosion and promote orderly drainage. This Law also empowers the Water Commissioner (now called the Director of the Water Authority), the Minister of Agriculture, and the regional drainage boards to declare areas around water sources as protective zones (arts. 4–7, 18; *see also* Water Law 1959: arts. 14, 15).

The Water Law of 1959 opens with several declarative sentences that have been promoted by the Supreme Court to an almost constitutional level. This Law declares that the domestic water sources are the property of the people and are to be managed by the State for the needs of the people and the development of the country: 'A person's rights in land do not provide him with rights in a water source which is on the land, flows past it, or its borders…' (arts. 1, 9). No one has the right to water supply if that supply reduces or salinates a water source (art. 4). Every person has the right to water, so long as this does not harm the quality or quantity of the water source, but that right must fit into one of the categories of water usage listed in the law: household, agricultural, industrial, handicraft, commerce, and services and public services (art. 5). An amendment in 2004 added protection and reclamation of nature and landscapes to the approved purposes (art. 6).

The Water Law defines water sources as 'springs, streams, rivers, lakes and other currents and accumulations of water, whether above ground or underground, whether natural, controlled, or manmade, and whether water rises, flows or stands therein at all times or intermittently, and includes drainage water and sewage water' (art. 2). By expanding the definition, the law provides for the protection of all existing and potential sources of water.

Initially, ministerial responsibility over the Water Authority and the water laws were entrusted to the Minister of Agriculture. At that time, agricultural water use was deemed of utmost importance, and agriculture was (and still is) the primary consumer of water—some 68% in 1986, falling to 56% in 2003 (Central Bureau of Statistics 2006: 73). All subjects related to water use were in the hands of the minister of Agriculture; which is no longer the case.

The law creates a Director of the Water Authority (the Director) 'to manage the water affairs of Israel' (art. 138). The Director determines who gets water at what quality and quantity. Each water abstractor/supplier requires an annual license. The Director determines river flows and ground and surface water levels. He chairs the National Drainage Board and determines rights along drainage channels. He is appointed to a 5 year term by the government rather than by any one minister responsible for the Water Law, thus making the Director the real authority in the decision making process. His powers provide the flexibility needed in managing Israel's highly developed water system. The law creates a Water Authority to set policy and advise the Director (art. 125), establishes a national water supply company (art. 46), and a Water Court, where claims for unjust supply or other complaints against the Director are filed (art. 140). The Director has the power to require any person polluting a water source to repair the situation within a reasonable amount of time at the expense of the polluter (art. 11).

8.2.1 The Courts

There are three tiers of courts in Israel: the Supreme Court, the District Court and the Magistrates Court. Magistrates and District Courts deal with civil suits and criminal cases. Jurisdiction before these courts is determined by size of claim and by severity of punishment. The District Court serves also as an appellate court for the Magistrates Court. The Supreme Court functions both as an appellate court and as a High Court of Justice. In this latter capacity, it deals with administrative and constitutional issues, exercises judicial review over the other branches of government, and gives relief in matters where no other court has jurisdiction. In order to relieve the caseload of the Supreme Court, the Court of Administrative Matters was created in 2000. Acting through the District Court, the Court of Administrative Matters hears appeals of decisions of local planning authorities (not regional or national authorities), claims of damages resulting from public tenders, and certain administrative petitions and appeals. There are also specialized courts: religious, military, juvenile, labour tribunals, traffic, etc.

The Water Court, created under the Water Law, sits on all matters referred to it by the Water Law and the Drainage and Floods Control Law (Water Law 1959: arts. 140–147). Cases are heard by a three-member panel, comprised of a district court judge who presides and two representatives of the general public. Appeals from the Water Court are to the Supreme Court. The court focuses mainly on appeals of decisions made by the Director concerning allocations (art. 31), maintaining water quality and prevention of waste of water (arts. 9–13), as well as appeals against the Director or the Minister for Environmental Protection when acting to prevent water pollution or due to their refusal to invoke their authority to do so (art. 20R).

The High Court serves as an alternative legal venue to the Water Court, generally when the Director is only one of several defendants (*Israel Union for Environmental Defence v. Minister of Finance* 2006). The Water Court is not a legal

venue for cases of the Director against other parties, for example non-compliance with an order. These cases are heard in the Magistrate and District Court according to the punishment or size of claim. In some cases the presiding judges are not familiar with the authority vested in the Water Court, leading to the court hearing cases that are not within its jurisdiction and vice versa (*Miloban MCP Inc. v. Water Commissioner* 2005). In more complicated cases, it can be difficult to decide whether the Water Court has jurisdiction.

Until the 1990s, very few criminal cases were brought for violations of environmental law in general and water law in particular. Since then, the number of cases has increased, while simultaneously judges are invoking harsher punishments and assessing personal liability in addition to corporate liability. Most cases are brought by the Ministry of Environmental Protection, who has been particularly active in filing suits against local authorities (*State v. City of Ashdod* 2000) and dairy farmers (*Kibbutz Tzuba v. State of Israel* 2003) for polluting water sources.

8.2.2 The Environmental Revolution and Its Effects in Israel

The 1970 U.S. Clean Water Act and the 1972 United Nations Conference on the Human Environment in Stockholm inspired countries to reduce water pollution and recognize the amenity uses of water. On the eve of the Stockholm Conference, work began in Israel to amend the Water Law. The 1971 amendment defines water pollution in broad terms, making any change in a water source, *prima facie* pollution (Water Law 1959: art. 20(A)). The water polluter was also broadly defined as: '…any agricultural or industrial enterprise, any building as so defined under the Planning and Building Law, any installation, including sewage installations, any machine or vehicle whose placement, operation or maintenance or use thereof causes or might cause water pollution' (art. 20A). The amendment empowered the Minister of Agriculture, and after 1989 the Minister of Environmental Protection, to publish regulations to prevent water pollution in the following circumstances: (1) the siting of potential water polluters; (2) the use of certain products or processes, including agricultural produce and the use of fertilizers and pesticides; (3) the production, importation, distribution or sale of any product; and (4) the regulation of transport on or near a water source (art. 20A). The Minister can determine the siting of factories, their products and processes, their distribution and sales routes, all for the purpose of preventing water pollution.

The Water Law authorizes the Director to order any polluter to provide him with plans for sewage disposal. Once a plan is adopted and approved by the Director, no deviation is permitted (art. 20E). Failure to submit a plan or deviation from a plan can result in a fine, or loss of water supply, except drinking water (art. 20H). The 1971 Amendment prohibits the discharge of any substance into a water source, but the Director is empowered to issue discharge permits (in consultation with the Minister of Health) in two instances (art. 20K): if the discharge aims at improving

a water source; or if there is no choice but to discharge for a fixed time. A list of permits is to be open to the public, and a report of such permits is to be filed with the Economics Committee of the Knesset. The Director must file annual reports with the Economics Committee on the water pollution situation and his actions to prevent such pollution (art. 20U). The burden of proving non-pollution is placed on any party caught placing anything near or in a water source that might change the nature of that source.

The 1971 Amendment is an all-inclusive pollution prevention mechanism. Unfortunately, it fails to deal with the real problem of local authorities' sewage disposal. Although the operation of local authority sewerage facilities are not expressly excluded from the amendment, it is questionable whether the Director can effectively enforce these provisions. If a local authority emits sewage effluent into a stream without a permit, can the Director use his powers to cut off water supply to a city? Can the Director build a multimillion dollar sewage plant and then charge the city for the expense? The Director could bring criminal charges against a mayor for pollution, but this sanction went unused until the creation of the Ministry of Environmental Protection in 1988. The amendment also fails to require the Director or the Minister of Environmental Protection to act to improve water quality in place of administrative discretion. The Director may issue discharge permits or order sewerage plans, and the Minister of Environmental Protection may control the use of pesticides and fertilizers, but they are not required to do so.

Finally, governments should aim to improve the quality of water to enhance enjoyment by current and future generations, including the protection of water sources for conservation, recreation, and scientific uses. Yet the 1971 Amendment failed to include these beneficial uses among the Water Law's list of protected uses. Even after the 1972 UN Conference on the Human Environment in Stockholm, the amendment failed to include the public in the decision-making process and ignored the ecological requirements of water. In 2004, the Water Law was amended to include the needs of nature as a recognized purpose for water use (art. 6(6)). Even this amendment failed to mention protection of habitats and biological diversity, or require the Director to set criteria for environmental flows. Given the Director's past achievements, he will probably wait until challenged in court to set the needed criteria.

8.2.3 Authority over the Water Cycle

The Director, with authority to 'manage the water affairs of the State' (art. 138), has the power to determine who will get water in Israel at what quality and in what quantity and has a free hand to determine stream flow and the direction and use of all waters. Once the Water Law nationalized water sources, the private citizen has a right to water, but not from a particular source and not of a particular quality (*Local Council Pardess Hana v. Minister of Agriculture* 1964). Due to political pressure, the Director used his role chiefly as an administrator and not as an active protector. While located in the Ministry of Agriculture, the Director's actions were influenced

by irrigation interests, allowing the capture of the headwaters of Israel's streams and rivers and authorizing engineering enterprises to bring water from the North to the South, while ignoring his duty to protect natural water sources and to limit water extraction to sustainable amounts (Sitton 2002). The quality of the aquifers deteriorated, while wetlands were drained and sewage flowed unconstrained in the diminished streams and wadis (Ministry of Environmental Protection 2002). In response to criticism, the government decentralized the water administration among different authorities through patchwork legislation instead of developing an overall strategy for water use. In 2006 the Knesset passed legislation in an attempt to reunite the parts.

8.2.3.1 Local Authorities

The first break in administration of the water cycle occurred at the local level. In 1962, the Knesset passed the Local Authorities (Sewerage) Law to enable local authorities to build sewerage works in addition to their pre-existing function as the local water supplier. A local authority may (and upon the demand of the Minister of the Interior, must) install a sewerage system within its boundaries or within any part thereof. The law vests 'ownership' of sewerage systems in local authorities and thus gives them the power over use of sewage water, breaking the total control delegated to the Director.

Most local authorities have adopted laws to provide adequate treatment and disposal of industrial sewage in a manner that avoids health and environmental nuisances and the contamination of water sources. Local authorities, however, generally failed to properly execute the power granted them for water supply and sewage purification. Instead, local authorities used water and sewage tariffs to pay general expenses. Under pressure from the Ministry of Finance, the Knesset passed a privatization bill—Water and Sewerage Companies Act Law—in 2001. The 2001 law and its 2004 amendment require local authorities to either create a municipal company or a private company to own and operate the system (¶¶6, 6A). This should ensure that revenues generated are fed back into the water and sewerage infrastructure and not used for the local authority's other needs. A regulator was created to oversee the pricing mechanism determined by privatized water companies.

8.2.3.2 River Boards

In 1965, the Water Law's control over water sources was further reduced when the Knesset passed the Streams and Springs Authority Law to broaden the powers of the existing drainage authorities. The original law required the creation of stream authorities, although, when feasible, existing drainage authorities were to be transformed into a stream authority. Yet no river authority was created until 1988 (for the Yarqon River), and no drainage authority received powers of a river authority until 2001. The Director did not intend to share his powers with another authority and

the Minister of Agriculture supported this position. It took relentless pressure by the staff of the soon to be created Ministry of Environmental Protection to break this lock hold.

A stream authority is different from a drainage authority. First, a drainage authority only handles drainage and provides flood protection while a stream authority has the power to plan the ecological destiny of a particular stream. Once empowered, a stream authority can determine water flow, eliminate health hazards resulting from pollution of the stream, and provide recreational areas and parks in and near streams. Second, stream authorities have a more variegated composition than drainage authorities, being composed of representatives of the Government, local authorities within the stream basin, water consumer and supply organizations, and representatives of landowners whose property borders a stream or who use the stream for commercial uses. Drainage authorities are composed almost solely of local government representatives.

The creation of the first stream authorities marked a historical turning point for the protection and reclamation of Israel's polluted streams. For the first time, riparian and government stakeholders met together in a statutory framework to determine the ecological destiny of a stream. The stream authorities look at the river in a different light than the Director. For him, a stream is part of the water infrastructure, and if it serves to carry off sewage or surface run-off then it fulfils its purpose. For a river authority, a stream is a beacon to the local population for recreation. Only after the creation of Israel's stream authorities did emphasis switch from streams as waste carriers to recreation areas. This message was not lost on the drainage authorities.

8.2.3.3 Catchment Basin Authorities

A combination of catastrophe, jealousy and common sense encouraged Israel's drainage authorities to become river authorities. The catastrophic rains in 1991–1992 caused severe flooding and the criticism of the State Comptroller (State Comptroller 2004), and the Judge's gavel (e.g., *Menorah Insurance Co. v. Zevulun Valey Drainage Authority* 1993), knocked sense into the government's water policy. The Comptroller described the conditions in Israel's drainage infrastructure, indicating that drainage authorities failed to keep the channels and streams in proper functioning order and that the planning boards failed to 'see' the streams and flood plains when they issued building permits. The government was castigated for failing to appropriate funds for Israel's natural infrastructure and local authorities were admonished for failing to create development plans synthesizing town growth, urban run-off, and flooding. The government committee set up to execute a reform converted 26 drainage authorities to 11 based on catchment basin lines. The newly authorized drainage authorities created 'after the flood' opened their eyes to a new world—their size and increased budget gave them an appetite for more. Pushed by jealousy of the stream authorities, there began a slow process of converting the drainage authorities into stream

authorities. Two drainage authorities have also received powers of a soil conservation authority, with four more waiting in the wings. This will enable the drainage authorities to control agricultural activities within the catchment basins to reduce run-off and pollution.

8.2.3.4 Protection of Lake Kinneret

The development of the National Water Carrier turned Lake Kinneret (Lake Tiberias or the Sea of Gallilee), Israel's only large body of freshwater, into the country's main surface water reservoir. This added to the multiple uses of the lake for swimming, camping, fishing, religious observance, boating and tourism. The draining of the Hula Valley increased the nutrient load in the lake and withdrawals to the National Water Carrier reduced the lake's quality. In 1969 local residents banded together to protect the Kinneret, leading to the creation of the Kinneret Administration, a government-affiliated body without statutory powers. It served as a round table for statutory bodies to work together to protect the lake. In time the Kinneret Authority attached itself to the Kinneret Drainage Authority and joined its administration. Today both the Kinneret Authority and the Kinneret Drainage Authority are authorized by the newly created Kinneret Association of Towns to protect the beaches around the lake and to keep them open to the public, clean and free of pollution.

The Kinneret case serves as an excellent example of what effective basin management can achieve in preventing pollution and enhancing environmental quality. Unfortunately, the Dead Sea has not been provided the same protection. In fact, protection of the Kinneret Basin has been at the expense of the Dead Sea. Maintaining a full Lake Kinneret, while extracting over 300 million cubic meters a year, has blocked most of the flow of water that once flowed from Lake Kinneret down to the Dead Sea. Salt springs and sewage that flowed into Lake Kinneret are now diverted around the lake and deposited into the southern Jordan River. There is no Dead Sea Authority to protect its well-being. Large areas of the Dead Sea in both Israel and Jordan have been handed over to giant mineral extraction companies, who have changed the landscape and the Sea, and contributed to the Sea's drying up.

Protecting only part of the Jordan River basin has caused a NIMBY ('Not In My Back Yard)' situation. The solution lies in the creation of a governance system for the entire basin. This is no easy task, in light of the basin being transboundary, requiring the cooperation not only of Israel, Jordan, and the Palestine Authority, but also of Syria and Lebanon (Laster et al. 2005; Chapter 16, Sabel, this book). The National Planning Council has decided to create a National Master Plan for the Dead Sea watershed; it could guide development of the area and safeguard the quality of the Sea and the surrounding region. Implementing it will be problematic unless the transboundary management problems are resolved.

8.2.3.5 Government Ministries

Up until 1972, the Ministry of Agriculture had sole authority to set water quality standards, including those for drinking water. In 1972, the Public Health Ordinance was amended to give the Minister of Health power to determine drinking water quality and a 1974 Amendment gave him the power to determine the quality of sewage effluent. According to regulations promulgated by the Minister of Health, treated wastewater used for the irrigation of crops may be used only on specific crops and only after sufficient treatment.

In 1971, an amendment to the Water Law gave extraordinary power to the Director to prevent water pollution (Water Law 1959: arts. 20–20Z). Sixteen years later, the Ministry of Environmental Protection was created and the portions of the amended Water Law relating to the protection of rivers, streams and other water sources from pollution were transferred to it. The only exceptions are establishing standards for the sanitary quality of drinking water and sewage, which remain the responsibility of the Ministry of Health.

With the creation of the Ministry of National Infrastructure in 2002, the Water Authority was transferred from the Ministry of Agriculture to the Ministry of National Infrastructure. This Ministry has administrative responsibility over Mekorot (the National Water Company) and the Sewerage Administration, formerly in the Ministry of Interior. The Ministry of Agriculture has retained control over the Drainage Law, regulation for watershed and flood zone land use and conservation, and over agricultural use of water.

8.2.3.6 Planning Authorities

The Planning and Building Law of 1965 created three tiers of planning commissions: local, regional and national. These commissions are to engage in positive planning of their sector of control, as well as prevent violations of planning decisions. Regional planning and building commissions are composed of representatives of the national government and local authorities in the region, with a majority of its members being representatives of ministries. The National Planning Council is a multifaceted body made up of over 30 members representing governmental ministries, local authorities, environmental and professional groups such as the Society for the Protection of Nature, architects' associations, and others. Planning boards have professional staffs, who are employees of the Ministry of the Interior. All proposed plans require the approval of the planning commissions, which includes a professional review, publication, citizen involvement, an open hearing for objections, and an environmental impact assessment process for significant projects. Planning commissions are also empowered to make positive plans, i.e. to plan certain areas for amenities, public open space, industrial parks, forests, etc. The National Planning Board may even determine population dispersal requirements, new towns, the creation of ports, highways and airports, in-flight patterns, etc. During the 1990s, the National Planning Council began the process of reviewing Israel's water sources and ordered two professional committees to develop plans for protection of Israel's water resources. A master plan

for sewage was approved in 2002. The plan declares areas for sewage collection, areas and guidelines for sewage treatment plants and reservoirs, and instructions and guidelines for sewage and effluent pipelines.

Much of the treated effluent which is not used in agriculture is used for replenishing the underground aquifers, with the soil acting as a natural filtering system. A statutory master plan passed in 2006 aims to protect groundwater sources by designating areas for aquifer replenishment and providing procedural guidelines. The plan includes guidelines for the protection of aquifers from pollution, desalination facilities, water plants, surface water reservoirs, underground reservoirs, supply and transport systems and drainage facilities. It should provide a long-term response to the country's water consumption needs in an integrated fashion. A national master plan for drainage was prepared for the purpose of protecting Israel's streams, both as drainage systems for the prevention of flooding and run-off, as well as maintaining them as an integral part of the ecology and landscape. Since 2001, master plans for desalination have been prepared both for individual plants and for a general planning framework. An integrated master plan for water to improve and coordinate the management of water sources, water supply, agricultural development, and environment protection is now in the approval stage.

8.2.3.7 Reuniting the Parts (2006–2008)

After years of fragmentation, a Knesset committee established to review the water administration published a report attacking the government for failing to encourage cooperation among the various arms of government to prevent pollution and control and better administer Israel's fragmented water administration (Knesset Committee Concerning Water 2002). The blame was laid on fragmentation, although the reasons went far deeper than just structural reform. Instead of trying to understand the underlying faults in the law, mainly its lack of enforcement by the Water Commissioner, the Knesset simply added more powers to more authorities. In addition, the Knesset failed to understand the water and land ethic being developed in other countries and the need for a catchment basin approach to water management.

The Water Commission and the Ministry of Finance jumped at the chance to change the state's water agenda and prepared legislation to grant as many administrative powers as possible to the Water Commission (Yaroslavitch 2006). The end result was the creation of the Water Authority with essentially the same duties as the previous Water Commission. The Law does not, however, solve the problem of fragmentation. The Minister of Health still has power over drinking water and sewage effluent quality, the Minister for Environmental Protection power over pollution control and the Minister of Agriculture drainage and flood control. An 'interesting' approach in the law is the transfer of power previously delegated to the ministerial level—the Minister of National Infrastructure—to the administrative level—the newly created Water Authority. The Water Authority will have power to publish regulations that the Authority itself will then execute. This attempt to be both legislature and administrator has been seriously criticized (Kislev 2006). It shows

the speed with which the law was drafted and passed, the lack of public overview, and an ignorance of constitutional law and the Attorney General's instructions on drafting subsidiary legislation. The Water Authority's controlling committee is composed of the Director, the Director Generals of four ministries (Agriculture, Environment, Interior and National Infrastructure), the budget director of the Finance Ministry, and two representatives of the general public.

8.2.3.8 Privatization

Privatization further compounded the fragmentation of Israeli water policy. Israel's water ethic, propounded by the Labour Party, was founded on three principles: the mythic importance of agriculture, a strong central government dictating economic policy, and abrogation of individual rights in water. When Labour lost its power over the central government, proponents of capitalism reached the water sector. Anything associated with government was considered inefficient at best, corrupt at worst. Much of Israel's government sector was privatized, starting with telephone and communications and then water, electricity, etc. Yet Israel's water sector actually operated smoothly and on the whole efficiently. The bulk supplier, Mekorot, supplied water at a decent quality and decent price to local authorities for supply to homes and business. Treasury officials found privatization of Mekorot to be a hard nut to crack, so they set their eyes on the municipal sector. Here there was no opposition because municipalities had often used income from water supply to pay salaries when in fiscal stress. Treasury officials demanded 'fiscal responsibility' at the municipal level by drafting legislation to require municipalities to privatize their water and sewerage infrastructure.

This revolution in Israel's water sector raises more questions than it solves. Although privatization is a tool, it became a goal in itself. Converting a municipal monopoly into a private monopoly does not encourage competition. This required the government to create a new regulatory authority to oversee the newly created water companies. This then is not privatization, but government control of municipal services, replacing the budgetary mechanism with a pricing mechanism. Finally, privatization of one branch of the water cycle does not allow implementation of an integrated system, thwarting sustainability and a holistic approach.

Today (2008), the following actors are involved in water management in Israel. The *Ministry of Infrastructure* oversees the Water Authority and Mekorot, thus having overall responsibility for bulk water supply and responsibility for implementing the new law establishing the Water Authority. The *Director of the Water Authority* has administrative responsibility for water supply and effluent permits and the quality of water sources. *The Water Authority* regulates the water sector, makes water policy, and writes rules and regulations concerning water production, pricing, supply, quality, usage, and incidents harmful to water. *Mekorot* supplies the majority of water in Israel, and is responsible for maintaining the National Water Carrier as well as pumping stations, pipelines and wells. It also operates one of Israel's largest sewage treatment plants and several desalination plants.

Additional water corporations, belonging to local authorities, also supply water in certain regions. *Local Authorities* are responsible for water supply and sewage removal (along with private companies as of 2009). The *Ministry of Environmental Protection* is responsible for the quality of water in nature, including streams, groundwater and floodwaters. *The Ministry of Agriculture* is responsible for agricultural use of water, drainage and run-off (through the drainage authorities) and soil conservation. *Drainage Authorities* are responsible for storm water and floods. Most have also been granted the powers to act as river authorities, with responsibility for river ecology and usage. Two have been granted the powers of a soil conservation authority, with four more on the way. The *Ministry of Health* is responsible for drinking water quality and effluent water quality used for an economic purpose. Administrative responsibility for treatment and use of sewage effluent is shared by the Ministry of Health, the Ministry of Environmental Protection, the Director of the Water Authority, the local authorities, and the planning boards.

Although water allocations are made annually depending on the amount of rainfall, political pressure and increasing demand has resulted in allocations that exceed annual replenishment. This unsustainable situation became acute during the consecutive drought years from 1999 through 2002 and 2005 through 2007, causing increased depletion and deterioration of water resources. The Government and the Water Authority came under severe criticism from the public for not taking action. The Government response was a decision to desalinate on a large scale and in 2002 approval was given for the construction of seawater desalination plants with a total capacity of 400 MCM/year. The first desalination facility was built at Ashkelon, with a capacity of 100 MCM and began production in August 2005. By 2010, three additional private desalination plants will be constructed along the Mediterranean which should provide approximately 15% of the country's present needs.

In 2002, the Director presented an 8-year transitional master plan for the water sector, representing a change in strategy from short to long-term planning. To achieve this, sources of water are being developed that are independent of annual rainfall patterns—desalination and usage of treated effluent. Water Authority policy calls for a reduction in freshwater usage by the agriculture sector to 530 MCM/year, with the reduced amount to be replaced by reclaimed effluents. Incentives include raising the price of water paid by farmers to the same level that local authorities pay for urban consumption and for compensating farmers for foregoing freshwater allocations, while being encouraged to switch to crops that are more appropriate for arid regions such as winter wheat cultivation and certain types of orchards (olives, almonds).

8.3 Conclusion

Israel's water administration has gone through several periods. The first period was characterized by central control of all uses of water and administrative authority in the hands of a water commission. Beginning in the 1970s until the 1990s the administration became fragmented, with power moving to other ministries and

administrative bodies. In 2006, a reversal of this process began. Yet the system still remains fragmented and will continue to be so for the foreseeable future. Modern bureaucracy requires that government agencies work together, as no one agency can control both Israel's water needs and meet nature's needs while maintaining water quality. As Israeli democracy continues to grow stronger, the administrative authorities must be more attuned to the people and the people more attuned to nature. This will require river basin authorities to set and implement priorities at the basin level while the central government continues to set national water policy and strategy. This strategy must include recognition that natural resources are limited, and every step taken outside the boundaries of sustainability harms the needs of the next generation.

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