

# **Assessment of Yemen Water Law**

## **Final Report**

September 2002

Prepared for:

Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) GmbH

By:

Tony Richards  
*Manzi Associates, United Kingdom*

## Abbreviations

BMZ	Federal Ministry for Economic Development and Co-operation
GoY	Government of the Republic of Yemen
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) GmbH
LWSSC	Local Water Supply and Sanitation Corporation
MAI	Ministry of Agriculture and Irrigation
MEW	Ministry of Electricity and Water
NWRA	National Water Resources Authority
NWRP	National Water Resources Policy
NWRS	National Water Resources Strategy
NWSA	National Water and Sanitation Authority
WRM	Water Resources Management
WSS	Water Supply and Sanitation

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## 1 Introduction

Historically, management of water resources in the Republic of Yemen has been inadequate, with some of the key problems being:

- water and property rights are not clearly defined,
- the problems of groundwater mining have led to abstraction rates that exceed recharge by about 80% on average, and in some places abstraction exceeds recharge by 400%,
- charges for water use are low, or non-existent,
- water usage is distributed 93% for irrigation purposes, 5% for domestic use, and 2% for industry, and
- political and economic upheaval over the past decade has resulted in limited institutional capacity, particularly to bring water demand in line with availability.

As a major step forward in the process of securing improved water resources management, the Government of the Republic of Yemen (GOY) have prepared a Water Law, which was ratified by the House of Representatives in July 2002.

The German Ministry for Economic Co-operation and Development (BMZ) is committed to supporting the Republic of Yemen in the field of water resources management and has requested the Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) GmbH to prepare a proposal for the improvement of water resources management in the country. The new Water Law is considered as the basis for such future co-operation.

This report sets out the opinions of an expert appointed by the GTZ to assess the strengths, weaknesses and adequacies of the Water Law, to identify any major obstacles to its implementation, and to determine issues that should be discussed with the Government of the Republic of Yemen in agreeing a future co-operation project. The detailed Terms of Reference are attached as Annex A.

The source documents used for the assessment were:

- English translation of the Draft Law No. ( ) for the Year 2002 concerning Water
- World Bank Office Memorandum: Water Resources Management in Yemen – Results of a Consultation, dated November 1, 1999
- Presentation on Roundtable on Yemen's Water Policy Reforms and the Role of the World Bank by the Chairman, Technical Secretariat for WSS Reform, 12/13 September 1999
- BMZ/MEW: Strategy for Yemeni-German Co-operation in the Priority Area of Water and Waste Management, dated May 2002

It should be borne that the assessment set out in this Report is based on an English translation of the original Law and, therefore, the terminology may differ from that used in the original document.

The Report commences with a summary of the Water Law, followed by a detailed assessment of its strengths and short-comings and the constraints to implementation. The Report concludes by presenting outstanding issues to be discussed with the Government of the Republic of Yemen.

## 2 Summary of the Water Law

### 2.1 Key Elements

The aim of the Law is stated (in Article 3) to be:

*“to regulate, develop and ration the exploitation of water resources, as well as the protection thereof from depletion and pollution, the improvement of the efficiency of conveying and distributing their uses and the proper maintenance and operation of the installations thereof, and the participation of the beneficiaries thereof in their management in the various stages of their development, investment and conservation thereof.”*

The Law is laid out in nine Chapters, some with sub-sections :

- I Nomenclature and Definitions
- II Objectives and General Concepts/Principles
- III Water Resource Management and Planning
  - i Management of Water Resources
  - ii Water Resources Planning
- IV Water Use
  - i Priorities of Water Use
  - ii Controls for Dealing with the Use of Water
- V Water Rights and Permits
  - i Water Rights
  - ii Licenses
- VI Water Conservation and Protection From Pollution
  - i General Technical Standards and Specifications
  - ii Conservation of Water Resources from Depletion and the Rational use of Water
- VII Protection From Floods and Rainwater Runoff
- VIII Enforcement and Penalties
  - i Enforcement Procedures
  - ii Criminal Punishments
- IX General Final Provisions

In general terms the Law reflects the issues that would be expected to be dealt with in water resources management legislation, with prime responsibility being given to the National Water Resources Authority (NWRA). However, there are two major issues arising from the formulation of the Law.

### 2.2 Major Issues

#### 2.2.1 *Lack of National Water Policy*

Article 7 states:

*“Water resources shall be developed and regulated in accordance with the provisions of this Law and its Executive Procedures and in light of a water strategy proposed by NWRA, which shall be issued by a decree of the Cabinet, and in accordance with the sectoral policies, plans and programs emanating from this strategy.”*

Thus it would appear that there is, as yet, no national or sectoral Water Resources Management Policy, nor is there a Water Resources Management Strategy. The absence of a National Policy is reflected in the lack of clarity in a number of aspects of the Law and, in some ways, the Law could

be considered as a statement of policy rather than a definitive piece of legislation. This is particularly the case when the Law deals with the contentious issues of traditional and common water rights.

## 2.2.2 Executive Procedures

In a significant number of areas, detailed consideration of how the Law will be implemented, and by whom, is unclear and is left for promulgation through Executive Procedures, which must be prepared within six months of the issuing of the Water Law. The Executive Procedures that are to be prepared, together with the relevant Articles of the Law, are as follows:

Article	Executive Procedure
11	Composition and duties of Water Basin and Water Zone Committees, together with their relationship with local authorities.
17 2)	Standards, data and measures for the preparation of Water Plans.
23 2)	Minimum and maximum standards for temporary use of water.
24	Conditions and controls for methods of treating water.
25 4) ii)	Controls for co-ordination between Ministry of Agriculture and Irrigation, National Water Resources Authority and other “relevant concerned entities”.
26 7)	Qualitative and environmental standards for the treatment and disposal of wastewater.
30	Procedures and controls for constructing water installations, small irrigation structures and excavation of subsidiary canals for harvesting water.
31	Specification of cases where Government can withhold acquired water rights.
34	System and rules for maintenance of a register of acquired rights of benefit from water.
37	Details for the implementation of license (permits) for construction of water installations or water wells.
38 4)	Approval of assignment of licenses (permits) to other parties.
42	Registration fees, rules, provision and procedures for permits for contractors and engineering offices involved in well drilling, groundwater exploration, consultancy studies, water resources works, and distribution of water well water.
46	General Standards and Technical specifications, and rules and procedures for: drilling water wells, site and general plans for water and irrigation installations, water treatment and desalination plants, Forbidden Wells, streams, creeks and natural springs, drilling equipment essential supplies, drilling substances and well casings, and pumps.
51	Procedures for right of entry of authorised employees to enter property to carry out work associated with the Law, and the compensation in the event of damage resulting.
54 1)	Standards and specifications related to the disposal of wastes.
54 3)	Notification of Forbidden Water Zones or Protective Zones where disposal of wastes is prohibited.
54 4) ii)	Conditions and standards of protection (in respect of disposal of wastes) by manufacturing plants before they are allowed to operate.
55	Basic controls and standards/criteria for the execution of studies and research on protecting groundwater aquifers in costal arrears from saline intrusion, and the construction of related water installations.
60	Procedural controls for the construction of pits or pools in rural villages for the disposal of domestic sewage.
63	Conditions for staff to be given the status of judicial enforcement for control and inspection of the Law.
73	Rules and procedures related to licenses, permits and approvals required under the Law, and the fees, charges and deposits for these and for the technical services of NWRA.
76 4)	Rules and controls for regulating the collection and use of fees charged by NWRA in respect of: water benefit registration fee, water benefit fee for commercial uses, and water resources protection fee against pollution.
77 2)	Rules and regulations for the collection and use of all charges, bonds, deposits and penalties which shall accrue to NWRA under the Law, or to “relevant concerned entities” for services provided by them under the Law.

This list demonstrates the uncertainties in assessing the potential effectiveness of the new Water Law.

### 2.3 Institutional Framework for Water Resources Management

#### *2.3.1 Relevant concerned entities*

A further major concern regarding the Law and its implementation, especially in the absence of a National Water Policy or Strategy, is the lack of a clear institutional framework within which the provisions of the Water Law will be exercised. Of particular concern are the repeated references to the “relevant concerned entity”, which is defined in Article 1 as:

*“Government ministries, authorities, institutions or projects, which the context refers to, that are connected in any manner whatsoever accordingly.”*

The use of this term implies a lack of clearly defined responsibilities and powers amongst the sector organisations, which could lead to implementation confusion or duplication.

#### *2.3.2 Current sectoral responsibilities of concerned entities*

It is understood that the following are, or were, the responsibilities of government ministries, authorities and institutions in respect of water resources management and water supply and sanitation:

The NWRA was established in 1995 by Presidential Decree No. 154, with a Chairman of ministerial rank, and is responsible for demand assessment and water resources management.

The Ministry of Agriculture and Irrigation (MAI) plays the main role in safeguarding water use as more than 90% of the total water demand is used in agriculture. In March 2002, the MAI was given responsibility for rural water supply and sanitation, previously carried out by the former General Authority for Rural Water and Electricity (GAREW).

The Ministry of Electricity and Water (MEW) is responsible for urban water supply and sanitation policy.

An Inter-ministerial Steering Committee for Water Supply and Sanitation Sector Reform, chaired by the Minister MEW has been established by Presidential Decree to spearhead sector reforms and facilitate donor co-ordination.

The National Water and Sanitation Authority (NWSA) was responsible for urban water supply and wastewater (WSS) services and, under water supply and sanitation sector reforms, now faces a changing role.

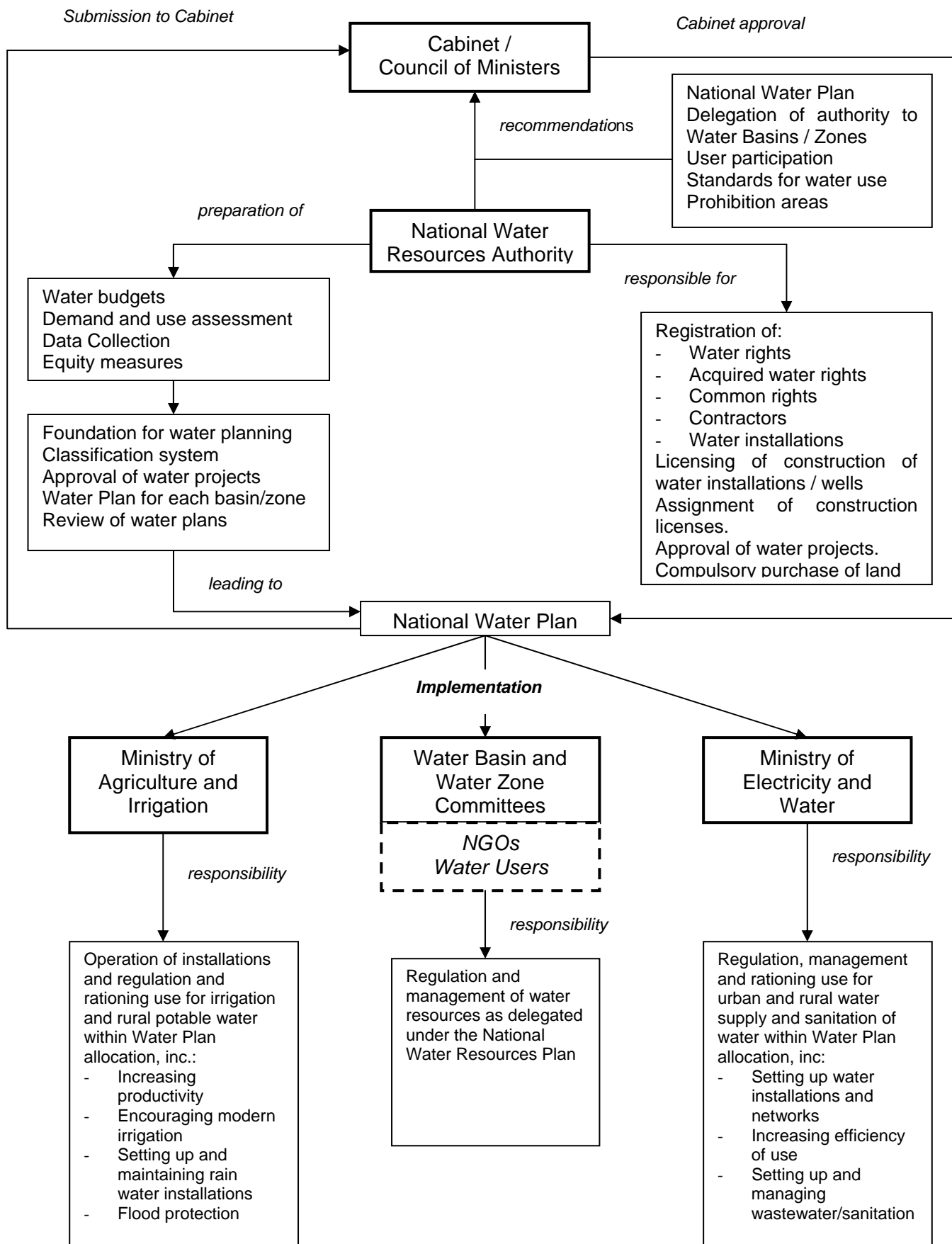
The Local Water Supply and Sanitation Corporations (WSSLC's), which have been recently established by Presidential Decree as part of implementation of the water supply and sanitation sector reform, are responsible for WSS in the Governorates in which they are established.

#### *2.3.3 Institutional Framework reflected in the Law*

From the assessment of the Law, an attempt has been made to set out the institutional framework for water resources management envisaged in the Law, and to incorporate the “relevant concerned institutions”. This is shown in the diagram overleaf.



Figure 1: Institutional Framework for WRM as reflected in the Water Law



NWRA has the responsibility for formulating the National Water Plan, using inputs from various inadequately defined entities, and presenting the Plan to the Council of Ministers for approval. NWRA is also given specific responsibilities of regulation and licensing.

Once the National Water Plan is approved, implementation will be carried out through three entities: Ministry of Agriculture and Irrigation (MAI), Ministry of Electricity and Water (MEW), and Water Basin and Water Zone Committees. However, the extent to which the latter Committees are to be empowered with responsibility for water resources management is subject to both the publishing of the relevant Executive Procedure, and the delegation of powers under the National Water Plan. As these Committees appear to be the only mechanism by which stakeholders can participate in WRM, the absence of any statement of their duties, powers and responsibilities in the Law is of concern.

The MAI and its affiliated authorities and institutions are charged with the operation of their installations, regulation and rationing of the use of water allocated for irrigation, and for potable water use in rural areas. However, sanitation in rural areas is not mentioned as a MAI responsibility.

Whilst the Law is primarily concerned with water resources management, it also moves into the water supply and sanitation sector through reference to the functions of the MEW and its affiliated authorities and corporations, which are charged with responsibility for the regulation, management and rationing use of water for urban and rural water supply and sanitation. These responsibilities are set out in Article 26 of the Law. There appears to be an overlap with the MAI in the area of rural water supply.

This Article also states that the responsibilities of MEW should take into account the general water strategies and policies and the Law of Local Authorities. It is not clear whether the general strategies and policies referred to are those relating to WSS, which have been formulated, or to those related to WRM, which have not.

#### 2.4 Summary of the Water Law

Whilst the Water Law is a major step forward and covers the issues to be expected in water resources management legislation, the omissions and lack of clarity in a number of areas could cause significant practical problems in implementation. Furthermore, the lack of a clear National Water Resource Management Policy, and with many aspects of detail yet to be formulated under Executive Procedures, assessing the implementability of the Law and its effectiveness is difficult.

### 3 Assessment of the Water Law

#### 3.1 Comparison with Best Practice

Best international practice in water resources management requires consideration of a number of key principles, including:

- Water as an economic good;
- Statement of ownership of water;
- Catchment management approach;
- User or stakeholder participation;
- Equity in resource allocation;
- Sustainability of resource; and
- Polluter pays.

Against these key principles, and bearing in mind that further details will be provided in the Executive Procedures when published, the Water Law compares in a mixed way as shown in the following table.

Key Principles	Water Law	Satisfies
Water as an economic good	Charges only levied specifically for registration of water rights and abstraction for “commercial” use.	×
Statement of ownership of water	Ownership of water, e.g. by the State, is not defined. It is a right accessible to all.	×
Catchment management approach	Water Plans by water basins, with Water Basin and Water Zone Committees to be established with management responsibilities yet to be defined.	✓
User or stakeholder participation	Water users and beneficiary associations, groups and committees, leagues or federations may be formed to involve public and beneficiaries in regulating water resources or in operations and maintenance of installations.	✓
Equity in resource allocation	Traditional and Common Water Rights appear to be given preference, which may not be equitable.	×
Sustainability of resource	Sector allocations are provided for, but other provisions are aimed at improving efficiency of use of water, rather than limiting abstractions.	○
Polluter pays	Provision for discharge permits and limits, for a Water Resources Protection Fee, and for compensation for damages.	✓

Given the strong vested interests of the holders of traditional and common water rights, particularly for irrigation purposes, it is perhaps not surprising that the Water Law is weak in the areas of water being an economic good, ownership, and equity in resource allocation. Implementation of the Law will need to be supported by persuading vested interests that it is to their long-term benefit to participate in water resources management and support the adoption of these key principles.

#### 3.2 Clarity of Intent

As has been commented on in Section 2 above, whilst the aim of the Law is stated clearly, the clarity as to how this aim will be achieved is reduced by the apparent lack of a National Water Policy; many implementation procedures being left to Executive Procedures yet to be formulated;

and to an unclear institutional framework. The clarity of intent is assessed in more detail in the following paragraphs, which examine a number of key issues in water resources management and how they are addressed in the Law.

### 3.3 Assessment of Key Issues

The new Law has been assessed in detail against key issues, which arise from application of the principles in 3.1 above. These are:

- 1 Definition of sectoral and development goals
- 2 Provision of an enabling environment
- 3 Mechanism for stakeholder participation in WRM
- 4 Definition of property and water rights
- 5 Principles of water allocation among sectors and between competing demands
- 6 Control of pollution
- 7 Mechanisms for conflict resolution
- 8 Private sector participation and water services
- 9 Financing of institutions, tariffs and pricing system.

The detailed assessment is set out in Annex B and is summarised below.

#### *3.3.1 Definition of sectoral and development goals*

Whilst the aim of the Law is clearly stated, implementation of the Law will only be determined in the light of policies and strategies yet to be developed, and through Executive Procedures yet to be formulated. Given the inherent problems of water resources management in Yemen, the Law provides a framework for the future, but does not in itself indicate how the problems will be addressed.

#### *3.3.2 Provision of an enabling environment*

The overall responsibilities of government ministries and their affiliated authorities and institutions are fairly well defined (apart from some duplication in respect of rural water supply), and the creation of Water Basin and Water Zone committees is a positive step forward towards catchment based WRM. However, the use of the term “relevant concerned entities” weakens the clarity of the responsibilities of individual entities, as does the fact that the responsibilities of the new Committees have yet to be defined as part of the National Water Plan. Transparency would have been improved if the roles and responsibilities of the “relevant concerned entities” and the new Committees had been specified in the Law. This would have been expected to be part of a National Water Resource Management Policy, which should have preceded the drafting of the Law.

#### *3.3.3 Mechanism for stakeholder participation in WRM*

The Law provides for stakeholder participation through water user groups and participation in the Water Basin and Water Zone Committees. However, how this will be implemented, and how effective the participation will be, is left to the Executive Procedures yet to be promulgated and to the National Water Plan.

#### *3.3.4 Definition of property and water rights*

It is understood that the key issue regarding water rights is that they are attached to property rights. The Law fails to address this key issue adequately.

Article 4 attempts to create a situation whereby water is a right accessible to all, while Article 6 states that groundwater exploitation is prohibited without a permit and that the Government shall intervene to regulate the rights and responsibilities of beneficiaries of any water resource. However, Article 27 states that existing and acquired water rights, whether prior to the issuance of the Law or thereafter, shall be maintained and not touched except for utmost necessity. This appears to weaken considerably NWRA's ability to introduce an effective permit system based on the availability and sustainability of the resource to address the current deficiencies.

This weakness fits with the view of the World Bank that existing water rights are only likely to be given up through awareness raising amongst beneficiaries of existing rights and their participation in user groups at catchment levels.

### 3.3.5 *Water allocation among sectors and between competing demands*

A clear priority of water use for domestic purposes is stated, followed by use for four other purposes, although these are not given a priority order, and the process of water planning is stated. However, there appears to be a lack of clarity as to which organisation will prepare the plans (both sectorally, and by basin and zone). For example, how can Water Basin Committees prepare local water plans, if their delegated authorities only arise from the Presidential Decree publishing the National Water Plan? Also, water plans cannot be prepared until the water policy has been formulated.

The framework for water planning is set out in the Law, but practical implementation is far from clear.

### 3.3.6 *Control of pollution*

In principle, the provisions for control of pollution are comprehensive and thorough. However, it is not clear exactly which institution will issue permits for discharges ("the concerned entities in co-ordination with NWRA"). Furthermore, the detailed powers and procedures to implement the Law are to be set out in Executive Orders.

The NWRA is given clear responsibility for monitoring water quality at the level of water resources, but it is not clear whether this includes monitoring of discharges of waste to surface and groundwaters. The "relevant concerned entities" are again part of the pollution control process and the distinction between the roles and responsibilities of these entities and the NWRA lacks clarity. Obviously, the organisation and staffing of NWRA will depend on the extent of its responsibilities in this area. Experience elsewhere clearly shows that having the legal powers for pollution control is one thing, having the means to implement this responsibility is another, which is often ignored.

### 3.3.7 *Mechanisms for conflict resolution*

The Government has general powers to intervene to regulate the rights and responsibilities of beneficiaries of water resources, although it is not clear whether "the Government" in this context is the NWRA or some other organ of Government. Also, the Law contains no provision for conflict resolution in the event of a dispute between NWRA and one or more beneficiaries, nor does it provide for any right of appeal against any decision of the NWRA..

It may be that the powers of "the Government", and rights of appeal against decisions of government institutions, exist under the general Laws of Yemen. However, it would enhance the clarity of the Water Law if clear powers and procedures in these areas were included.

### 3.3.8 *Private sector participation and water services*

The only reference to participation of the private sector in water resource management and water services is focussed on the need for a permit to be issued by the employer before engaging a contractor. Specific reference is also made in respect of the need for contractors also to be in possession of a professional licence to practice their profession, which includes distribution of waterwell waters. The Law makes no reference to the powers of the Ministry of Electricity and Water, or its affiliated authorities and institutions, to enter into contracts for the provision of water supply and sanitation services. Unless this is clearly stated in other legislation, the role of the private sector in the provision of water services is unclear.

### 3.3.9 *Financing of institutions, tariffs and pricing system.*

Whilst the NWRA may make charges for licences, permits and approvals required under the Law, NWRA may only propose levying fees for a limited number of water uses. These are: a water benefit registration fee; a water benefit fee for commercial uses (which excludes domestic or agricultural use); and a water resources protection fee against pollution. The rules for the application of these fees will be set out in the Executive Procedures.

There would appear to be no general provision for charging an abstraction (i.e. volumetric) based fee on all water users, especially on agricultural use. The effect of the Law appears to be that only commercial use (2% of abstractions) will be subject to this form of charge. This does not reflect water being an economic good.

## 4 Implementation Constraints

### 4.1 Timescale and Institutional Capacity

Together with the inherent short-comings of the Water Law as described in the previous section, a further constraint is that the Law lacks the clear policies, plans and procedures to enable its implementation. Some of these uncertainties may be clarified through the Executive Procedures to be promulgated under the Law. However, there remains the constraint of an inadequately defined institutional and organisational framework to support that implementation.

Given what is understood to be the weak institutional capacity of the sector organisations, the requirement that the Executive Procedures are to be presented within six months of the issuance of the Law appears to totally impracticable, particularly when the water resources policies, strategies and plans also have to be prepared. Thus, in drafting the Law, it would appear that little consideration has been given to how it will be implemented.

### 4.2 Implementation Activities to be Carried Out

Implementation of the Water Law will require *inter alia* the following activities to be carried out in the area of water resources management:

- Preparation of the Executive Procedures
- Preparation of the National Water Resources Policy
- Preparation of the National Water Resources Management Strategy
- Preparation of a system for classifying water resources
- Definition of water basins and water zones
- Preparation of catchment based and sectoral Water Plans
- Preparation of the National Water Plan
- Establishment of Water Basin and Water Zone Committees
- Establishment of national monitoring and information systems
- Support the establishment of water user associations
- Determine the operating budgets for NWRA and the Water Basin and Zone Committees
- Determine the income to be generated from water fees to meet these costs
- Carry out human resource development and capacity building to fulfil the new roles.

### 4.3 Prioritisation of Activities

In order to effectively operationalise the Water Law, and to address the current weaknesses and lack of clarity, it is proposed that the above activities be implemented in an order of priorities which will enable a clear framework for water resources management to be established. This sequence of activities, and their inter-relationships, is shown in the implementation plan overleaf.

## Plan for Implementing the Water Law

Priority	Activity	Justification
1	Preparation of National Water Resources Policy (NWRP)	The NWRP should set out the overall policy and priorities which GoY wishes to adopt in order to achieve sustainable and equitable water resources management. The NWRP will also help clarify what the Water Law has been designed to achieve, and identify any anomalies or short-comings.
2	Preparation of National Water Resources Strategy (NWRS)	From the Policy, the NWRS should clearly set-out the framework within which WRM will be carried out, identify the actions to be taken, and clearly define the entities involved and their responsibilities and powers. The NWRS should also contain an implementation plan over the next, say, five years.
3	Definition of water basins and water zones	Definition of water basins and zones is a pre-requisite of implementing catchment-based WRM and the preparation of Water Plans.
4	Determine the operating budgets for NWRA and the Water Basin and Zone Committees	Having defined the responsibilities and powers of the NWRA and Water Basin/Zone Committees in the NWRS, the operating budgets for operating these entities must be determined (including organisational and staffing requirements) in order to assess overall financial requirements.
5	Determine the income to be generated from water fees to meet these costs	To meet the financial requirements from the previous activity, a tariff and charging system must be developed, based on "water as an economic good".
6	Preparation of Executive Procedures	Most, if not all, of the Executive Procedures can only be finalised and promulgated once the NWRP, NWRS, and the financial implications, have been approved. However, preparation in draft could be done in parallel with the above activities.
7	Preparation of water resources classification system	A water resources classification system is a pre-requisite of WRM planning.
8	Establishment of Water Basin and Water Zone Committees	As the Water Plans are to be prepared on the basis of catchments and sectors, these Committees should be established so as to contribute to the preparation of plans that they will be responsible for managing.
9	Preparation of catchment based and sectoral Water Plans	Plans can now be prepared with positive contributions at the catchment and sectoral level as the Water Basin Committees will be established, and the responsibilities of sector entities will have been clearly defined in the NWRS.
10	Preparation of National Water Plan	The overall National Water Plan can now be prepared.
11	Establishment of national monitoring and information systems	Monitoring implementation of the National Water Plan, and providing for subsequent amendment, requires adequate monitoring and information systems to be introduced. (This activity may have to be carried out earlier if current systems



		are inadequate for preparation of the Water Plans.)
12	Support the establishment of water user associations	Necessary to involve users in the implementation of the National Water Plan.

Human resource development and capacity building should be on-going as institutional responsibilities are clarified, and new entities are established.

## 5 Outstanding Issues

### 5.1 Open Questions for Further Consideration

Based on the assessment of the Water Law set out above, the following issues should be followed up with GoY in order to clarify the soundness of the Water Law in being able to address the inherent problems of water resources management in Yemen:

- How does GoY envisage carrying out all of the activities necessary to operationalise the Law, in particular the policies, strategies and Executive Procedures, and what is their timetable for doing so?
- Who will prepare the Water Plans by water basin and by sector?
- How does GoY envisage water users being integrated into water resource management through the Water Basin and Water Zone Committees?
- Will water abstraction charges based on volume be applied to all water users, particularly agriculture?
- How will “the Government” intervene to regulate the rights and beneficiaries of water resources and who is “the Government” in this context?
- As the Water Law appears to maintain existing and acquired water rights, except for utmost necessity, how does GoY envisage reducing the current and unsustainable levels of abstraction.
- Will GoY clarify what are the “relevant concerned entities” and set out their respective roles, responsibilities and powers?
- What are the general rights of appeal against decision made by NWRA under the Water Law?
- What are the powers of MEW and its affiliated authorities and institutions to enter into contracts with the private sector for the provision of water services?
- What is the institutional and human resource capacity to implement and enforce the Water Law?

## Terms of Reference

### Assessment of Yemen Water Law

#### *Background Information*

After years of intensive political discussions, the Government of the Republic of Yemen signed a Water Law which has been ratified by the Parliament in July 2002. The Water Law has been long-awaited by the international donor community. It is considered as a major step towards a better management of water resources. Water resources management is rather poor so far: water rights and property rights are not determined, domestic water tariffs are low, abstraction exceeds recharge by about 80%, the institutional set-up is centralized, some sector related agencies are of low performance.

The German Ministry for Economic Cooperation and Development (BMZ) is committed to support the Republic of Yemen in the field of water resources management. First steps haven been taken by the KfW in the Sadah basin (support of a water-related coordinating body). The GTZ is requested to submit a proposal to the BMZ for the improvement of water resources management in the Republic of Yemen. The Water Law is considered as the basis for future cooperation. Therefore the Water Law has to be assessed.

#### *Documents*

- Water Law, July 2002
- Law of Local Authorities, 2000
- The World Bank: Water Resources Management in Yemen - Results of Consultation, 1999 (by John Briscoe)

#### *Terms of Reference*

### **1. Summary of the Water Law**

The summary should provide a short introduction to the Water Law.

- Identification of key elements, regulations, major issues
- Is it a Water Resources Management Act or does it include Water Supply also?
- Description of the organisational set-up for water resources management

### **2. Assessment of the Water Law**

The assessment will be the basis for further discussions on German-Yemeni cooperation in the field of water resources management with the Government of the Republic of Yemen and its executing agencies.

- Completeness according to international principles for good water governance (e.g. polluter pays, water as an economic good, catchment approach etc.)
- Clearness of the regulations
- Does the Water Law address the following issues in an adequate manner to provide an effective regulatory framework for water resources management?

1. definition of sectoral goals and development goals
2. Does it provide for an enabling institutional environment (legal roles and responsibilities of institutions and their inter-relationship)?
3. definition of property rights and water rights, principles of water allocation among sectors, mechanisms for water allocation between competing demands
4. mechanisms for stakeholder participation in water resources management
5. conflict resolution mechanisms
6. private sector participation and water services
7. financing of institutions, tariff and pricing system

If the consultant identifies other relevant issues, he should extend the list.

- Is the Water Law a “good” water law to achieve sustainable water resources management?

For a better reading of the results the following matrix should be used.

<b>Issues mentioned above</b>	<i>Article</i>	<b>Strengths</b>	<b>Short-comings</b>	Rating: from ++ to --

### **3. Open Questions**

- What are the open questions that should be discussed with the Government of the Republic of Yemen?
- What might be major obstacles to enforce a water act such as the Water Law?

### **4. Further requirements**

The report should not exceed 15 pages.

The report has to be submitted by 31<sup>st</sup> of September 2000 to GTZ head office, regional and sectoral department.

GTZ will provide more information about the specific situation upon request by the consultant. Contact person: Jochen Renger (jochen.renger@gtz.de)

## ASSESSMENT OF KEY WATER RESOURCE MANAGEMENT ISSUES AS DEALT WITH IN THE WATER LAW

Article	Article Text	Strengths	Short-comings	Rating
<b>Issue 1 - Definition of sectoral and development goals</b>				
3	This Law aims to regulate, develop and ration the exploitation of water resources, as well as the protection thereof from depletion and pollution, the improvement of the efficiency of conveying and distributing their uses and the proper maintenance and operation of the installations thereof, and the participation of the beneficiaries thereof in their management in the various stages of their development, investment and conservation thereof.	Clear statement of the objective of the Law		++
7	Water resources shall be developed and regulated in accordance with the provisions of this Law and its Executive Procedures and in light of a water strategy proposed by NWRA, which shall be issued by a decree of the Cabinet, and in accordance with the sectoral policies, plans and programs emanating from this strategy.		The Law enforces a strategy to be decreed by Cabinet but yet to be developed, and a sectoral policy that emanates from this strategy. This approach is the wrong way round – first should come a National Sectoral Policy, followed by a strategy and the enabling legislation.	--
<b>Issue 2 – Provision of an enabling environment</b>				
2. 3)	Relevant concerned entity: Government ministries, authorities, institutions or projects, which the context refers to, that are connected in any manner whatsoever accordingly.		Lack of clear definition of which entity has what responsibilities, powers and duties could create scope for confusion of roles.	--
9	The relevant concerned entities shall regulate, administer and prepare their respective sectoral policies and plans related to the development and rationing of the uses of water in coordination with NWRA.		This Article appears to conflict with the preparation of Water Plans described in Articles 8, 13, 16 and 17 (see Issue 5 below)	--

12	NWRA is responsible for estimating the water budgets, evaluating demand of water and the quantities that may be exploited by the sectors that utilize water, by means of monitoring and assessing water resources and the uses at the Water Basin Level, and for collecting the data and information that is required for the regulation and development of such resources through the hydrological stations for each basin and the national hydrological stations. NWRA will also undertake all the measures that insure equity in benefiting from the available waters and the protection thereof from depletion and pollution.	Gives overall responsibility for water resource allocation to NWRA.	This Article appears to conflict with the regulation responsibilities of the “relevant concerned entities under Article 9 above.	+
25	Without prejudice to the provisions herein stipulated, the Ministry of Agriculture and Irrigation and the authorities and institutions that are affiliated with the Ministry shall operate their installations, regulate and ration the use of water allocated for irrigation and potable water use in the rural areas in accordance with Water Plan, in light of the general strategies and policies for water resources, irrigation policies and other relevant policies.	Gives the Ministry of Agriculture and Irrigation, and its authorities and institutions, for regulation and management of water use for the agriculture sector and potable water use in rural areas.	Responsibility for potable use in rural areas is in apparent conflict with the responsibilities of the Ministry of Electricity and Water under Article 26 below.  Potential conflict with the role and responsibility of Water Basin and Water Zone Committees under Articles 10 and 11 (see Issue 3 below).	-
26	Without prejudice to the provisions herein stipulated, the Ministry of Electricity and Water and the authorities and corporations affiliated with the MEW, whether in the urban areas or the rural areas shall regulate, manage and ration the use of water allocated to MEW in the Water Plan, and in light of the general water strategies and policies and conforming to the Law of Local Authorities. (Sub-articles relate to specific water supply and wastewater services.)	Gives the Ministry of Electricity and Water, and its authorities and institutions, responsibility for regulation and management of water use in urban and rural areas.	Potential conflict with the role and responsibility of Water Basin and Water Zone Committees under Articles 10 and 11 (see Issue 3 below).	-

74	NWRA should consult and coordinate, with the Ministry of Agriculture and Irrigation and the Ministry of Electricity and Water, with respect to the respective tasks thereof, which are stipulated herein.	Requires NWRA to consult with the Ministries of Agriculture and Irrigation, and Electricity and Water on all matters.	Not clear whether final decision is by NWRA or the respective ministries, or who resolves any disputes.	+
<b>Issue 3 - Mechanisms for stakeholder participation in WRM</b>				
10	Water users and beneficiaries associations, groups, committees, leagues, or federations may be formed for the purpose of involving the public and the beneficiaries of water in regulating water resources or in operations and maintenance of water installations. The Procedures for the implementation of the provisions of the Law shall set out the purposes and all the detailed rules related to such organizations accordingly.	Provides for user involvement.	The methods of working are left to be defined in the Executive Procedures to be promulgated under the Law.  The delegation of authority is also to be defined under the National Water Plan to be issued by Decree (see Article 18 under Issue 5 below).	+
11	NWRA, in coordination with the relevant concerned entities and local authorities, shall set up Water Basin & Water Zone Committees under the supervisions of NWRA, with appropriate representation for the relevant NGO's and the water users thereof. The Executive Procedures of this Law shall set forth the composition the active duties of such committees, as well as their tenor and relations with the local authorities, so as not to violate the uniformity of water resources in accordance with the provisions of this Law and in such a manner as to conform to the articles of the Law for the Local Authorities No (4) for the Year 2000 that are related to this matter.	Provides for Water Basin and Water Zone Committees, with representation of water users.	The methods of working are left to be defined in the Executive Procedures to be promulgated under the Law.  The delegation of authority is also to be defined under the National Water Plan to be issued by Decree (see Article 18 under Issue 5 below).  Role of local authorities not clear.	+
<b>Issue.4 - Definition of property and water rights</b>				
2.18)	Traditional Water Rights: inherited and recognized sustained rights, traditionally, legally or both, and which are based on the individual,			

	family or collective rights of use of rainwater, rainwater runoff, streams, springs, water wells and water installations and the purposes and limitations of such utilization and the associated common rights thereof.			
2. 19)	Common Rights: Rights to water resources passed down in succession to third parties, or such rights with respect to water installations, fountains and water wells, such as the right for access to drinking water for humans and livestock, or for any recognized purpose, or the right of passage pasturage in rainwater catchments and watercourses and canals, or the priority rights of irrigation to the highest located areas or to the surplus water beyond the original utilization rights thereof or the rights of inspection and monitoring the developments that occur to water in accordance with the stipulations herein provided.			
4	Water is a right that is accessible to all and does not become privately owned except by means of transport, acquisition or any other related methods an it is optimal and is secured by its similitude	Intent appears to be that access to water is a public right and cannot be considered as being under private control under it has been abstracted (in accordance with a water right)	Translation is not clear.  If water can become privately owned, it is not clear how NWRA can exercise control of that water.	+
5	The watercourses in the wadis are property in common to all the beneficiaries, and all the water installations and water wells set up by the Government are considered public property, and notwithstanding the ownership thereof they are subjected to a registration and licensing regime in accordance with the provisions of this Law.	Ensures that any Government water installations require the relevant permits in accordance with the Law.	“Beneficiaries” are not defined in the Law but this clause appears to provide primary control of water resources in wadis to holders of traditional water rights and common rights as defined in Article 2 18) and 19) above.	+
6	All beneficiaries of any of the water resources shall enjoy the right to benefit from this	Gives the Government powers to regulate all water resources.	“Beneficiaries” are not defined in the Law but this clause appears	+



	Resource, in such a way as not to harm the interests of other beneficiaries, and shall carry out all the duties required of him with respect to the conservation of these resources and safeguard them from depletion and pollution. The exploitation of groundwater resources is prohibited unless a prior permit thereto has been obtained. The Government shall intervene to regulate the rights and responsibilities of benefiting from these resources in accordance with the provisions of this Law and the procedures regulating the implementation thereof accordingly.		to be aimed at appeasing holders of traditional water rights and common rights by setting out their duties and responsibilities in respect of the resources, and then giving the Government powers to intervene and regulate.  Not specific on who represents Government in this respect.	
27	The right of water use authorizes the holder thereof to dispense the water, in such a way as not conflict with public interest and the prevailing customs and traditions in each Water Zone or Water Basin, and in all cases, the existing and acquired water rights, whether prior to the issuance of the Law or thereafter, shall be maintained and shall not be touched upon, except for the utmost necessity thereof and with fair compensation provided therefor.	Protects water rights existing before the Water Law comes into effect.	Appears to appease traditional and common water right holders and, where these already in excess of available resources, could weaken the NWRA position to effect reductions in abstraction.	-
28	Due consideration is to be given to benefiting from the traditional water rights of rainwater harvesting and natural runoff flow, with respect to their use in irrigation and their link with agricultural land that benefits from such water resources. This should also take into consideration the properties of each region with respect to the customs, traditions and irrigation systems in effect in each region of the Republic.	Protects surface water rights and practices existing before the Water Law comes into effect.  Existing rights must be registered within three years.	Appears to appease traditional and common water right holders and, where these already in excess of available resources, could weaken the NWRA position to effect reductions in abstraction.	-
29	The traditional rights of benefit from natural springs, streams brooks, creeks and maintained surface wells, the depth of which does not	Protects surface water rights and practices existing before the Water Law comes into effect.	This appears to conflict with Article 45, which permits wells to be dug up to 60 metres without	-

	<p>exceed sixty meters, and the common rights associated with them, prior to the issuance of this Law, on which the holders thereof maintain their currently hold as existing rights. This is without prejudice to the rules for registration and these rights remaining allocated for the purposes, for which they were originally granted. In the event that such rights are transferred to other parties, then such rights shall be compulsorily transferred to the new owners, and in the event that the land benefiting from the water are partitioned, the water shall be apportioned according to the land areas resulting from the partitioning of such land.</p>	<p>Existing rights must be registered within three years.</p>	<p>NWRA approval except in restricted areas and without prejudice to traditional and common rights. In other words rights to existing shallow wells must be registered, but new wells can be dug without a permit.</p>	
30	<p>Without prejudice to the sanctified and water quarantine areas, quantities of water may be acquired in cisterns, pools or streams, by means of directly harvesting the water from rainfall that falls on the surrounding land thereof, which is owned by the beneficiary thereto, or in the neighbouring areas, where the beneficiary has been authorized to benefit from harvesting the rain therefrom. Such acquisition is considered as an acquired benefit, if it does not harm the benefits previously acquired thereto and does not conflict with acquired water rights, in accordance with the recognized traditional rights and customs related to the right of benefit from rainfall water. The beneficiary may also, according to this article, set up the required water installations, which take advantage of the water quantities gained, as well as the construction of small irrigation structures and to excavate for subsidiary canals, in accordance with the procedures and controls that are set forth in the Executive Procedures.</p>	<p>Provides for direct harvesting of rainfall by owners of land on which the rain falls.</p>	<p>Unclear how this could affect water planning as the acquired right could limit available run-off for overall water resource. Detailed procedures will be set out in Executive Procedures.</p>	-

79	With respect to water locations and water courses, and with regards to watering rights based on tradition and custom, the Civil Law shall apply accordingly.		Appears to be a general appeasement of holders of traditional and common water rights and it is unclear how the application of Civil Law could undermine application of the Water Law	-
<b>Issue 5 - Water allocation among sectors and between competing demands</b>				
20	The use of water for drinking and domestic purposes shall have absolute priority.	Clear statement of priority.		++
21	Without prejudice to the provisions of the previous article, water may be allocated for any of the following water uses: 1. Watering livestock. 2. Use in public facilities 3. Industrial Purposes. 4. The minimal limits to meet environmental requirements.	Clear statement of water uses.	Not stated as being in order of priority.	+
8	RoY shall be divided into Water Basins and Water Zones, in which the water resources will be assessed in each one of them, and for which the plans will be prepared for their development and use, as autonomous units, that are indivisible that shall be regulated on the basis of the principle of Integrated Water Resources Management, with a view towards conforming to the social and economic orientations and conserving the environment.	Clear statement of the basis of water planning.		++
13	NWRA shall formulate the foundations for water planning for RoY, in light of the results of the assessment of the water basins and water zones, whereby they should include the general indicators of the water situation, the trends of the demand for all types of water use, the short,		Does not specify who will prepare the water plans within the NWRA foundations. Article 17 below tasks NWRA with reviewing sectoral and water basin plans but not preparation.	+

	medium and long term water budgets. Such foundations shall be construed as the basis for the preparation of the alternatives to be set forth in the Water Plan.		Article 25 requires Ministry of Agriculture and Irrigation to identify irrigation demands as an input to the plans.	
16	For each water basin and water ( <i>zone</i> ) there will be a water plan that is consistent with the water policy and the general foundations for water planning in RoY. This plan shall, after ratification, become an indivisible part of the National Water Plan.		Water policy has yet to be prepared.	+
17	<p>1) NWRA is responsible for reviewing the sectoral and water basin plans and for the preparation of the Water Plan, in coordination with the relevant concerned entities.</p> <p>2) Water plans should be prepared based on the standards, data and measures which are set forth in the executive procedures of this Law, and also the strategies, policies and decrees in respect thereto and the orientations set out in the development plans and the general foundations for water planning in RoY.</p>		<p>The only sectoral plan referred to in the Water Law is for irrigation.</p> <p>Water Plans are to be prepared based on strategies, policies and procedures, which have yet to be formulated.</p>	+
18	A decree shall be issued by the Council of Ministers for the approval of the Water Plan, based upon a proposal presented by NWRA. The plan shall give due consideration to the delegation of authority in a manner that will enhance decentralization and the participation of the beneficiaries in the regulation and management of water resources at the Water Basin and Water Zone level, without undermining the unity of the management of water resources.	Provides clear procedure of issuing a national Water Plan and the requirement for defining the participation of beneficiaries in regulation and management.		++

<b>Issue 6 – Control of pollution</b>				
47	Without prejudice to Article (54) of this Law, the relevant concerned entities, in coordination with NWRA, shall issue the relevant permits for disposal of wastewater, and waste oils and shall set the locations and methods for the disposal thereof, the establishment of the relevant installations thereto and for the reuse for such treated wastewater, under the approved conditions, standards and specifications therefore, as well as the construction of sanitary drainage networks, the construction of desalination plants in accordance with applicable Laws.		Does not specify which are the relevant concerned authorities. From Article 26 it is assumed to be the Ministry of Electricity and Water.  The applicable Laws should be specified.	-
54	NWRA shall have powers to protect water resources against pollution, maintain water quality and prevent activities leading to the pollution of these resources or the degradation of their quality and to confront emergency pollution situations with the cooperation of all the entities concerned. All the entities (that are engaged in activities, which could potentially pollute water resources) shall abide by the following: 1. All entities that are engaged in activities that lead to pollution of water resources must comply with the standards and specifications related to the disposal of liquid, solid, radiation, thermal, lubricant wastes, etc in accordance with this Law and the Executive Procedures thereof. 2. All entities, notwithstanding whichever they are, are forbidden from disposing of any wastes of any wastes, regardless of their source, or throwing away accumulating any solid or liquid wastes or the carcasses of	Clear powers and comprehensive general provisions to control pollution given to NWRA.	Details to be set out in Executive Procedures yet to be prepared.	+

	<p>dead animals in the wadi flow passages or in the areas designated by NWRA, or to engage in any activity in these water passages which could directly or indirectly lead to the pollution of water resources or the deterioration of the quality thereof.</p> <p>3. The relevant entities and individuals shall comply giving due consideration to the Forbidden Water Zone or Protective Zones designated by NWRA near the wells and the other water resources, which will be set forth in the Executive Procedures.</p> <p>4. i) NWRA should coordinate with the relevant concerned entities and after the approval of the Cabinet should close down plants or installations that dispose of their wastes without a permit, or in violation of the permit they have, or without adherence to the orders and instructions issued to them by NWRA or the relevant concerned entities to remove or halt these wastes, in accordance with the Law, and they are to be compelled to pay compensation for any damage they might cause</p> <p>ii) NWRA has the right to assign areas as protected zones from any industries, the wastes of which constitute a hazard to the water resources. The Executive Procedures shall spell out the conditions and standards of protection that manufacturing plants should adhere to before they are permitted to operate. Government entities should not issue manufacturing investment licenses except by coordinating with NWRA accordingly.</p>			
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	<p>5. NWRA, in collaboration and coordination with the relevant concerned entities, shall prepare the procedures for regulating the disposal of industrial wastes, the use of agricultural fertilizers and pesticides and all hazardous substances that are harmful to water resources and the environment and will select the garbage and waste dumping areas, as well as to classify the damages that are caused by the polluting activities and the potential damages they cause to the water resources of RoY.</p>			
56	<p>Without prejudice to the stipulations of Article (54) of this Law:</p> <p>1) Effective from the date of issuance of this Law, it shall be prohibited to engage in activities specifically dealing with the transport or disposal of pollutant wastes, regardless of their source, or to issue permits to set up any industrial establishments, the wastes of which would lead to pollution of water resources or the degradation of their quality, until they have provided a study evaluating the environmental impacts of such activities or installations and the relevant concerned entities with protecting the environment shall issue the required permits accordingly in coordination with NWRA.</p> <p>The owners of existing industrial establishments prior to the issuance of this Law and all those are engaged in any of the activities stipulated in the above paragraph must come to NWRA within six months of the issuance of this Law to adjust the status of their installations in accordance with the</p>	Requirement for Environmental Impact Assessment.	Does not define which are the relevant concerned entities with protecting the environment to issue the permits.	+

	provisions of this Article.			
57	Without prejudice to the provisions of the foregoing article, all natural or legal persons are forbidden from disposing any industrial, agricultural, commercial, or medical wastes in the public sanitation network, except after prior permit from the relevant entity concerned with the operation of the network, which should specify the technical level in keeping with the approved technical specifications.	Provides for trade effluent control.	Does not specify who is the relevant entity concerned with the operation of the network. However, under Article 26. 6) this is the Ministry of Electricity and Water.	+
59	NWRA shall monitor the quality of water at the level of the water resources, to ensure the soundness of their use. The other entities are responsible for monitoring during conveyance, distribution and usage thereof.	Clear responsibility for NWRA to monitor water resource quality.	“Other entities” is not specific, although under Articles 25 and 26 this function is given to the Ministry of Agriculture and Irrigation, and Electricity and Water respectively.	++
<b>Issue 7 - Mechanisms for conflict resolution</b>				
6	All beneficiaries of any of the water resources shall enjoy the right to benefit from this Resource, in such a way as not to harm the interests of other beneficiaries, and shall carry out all the duties required of him with respect to the conservation of these resources and safeguard them from depletion and pollution. The exploitation of groundwater resources is prohibited unless a prior permit thereto has been obtained. The Government shall intervene to regulate the rights and responsibilities of benefiting from these resources in accordance with the provisions of this Law and the procedures regulating the implementation thereof accordingly.	Gives the Government powers to regulate all water resources.	“Beneficiaries” are not defined in the Law but this clause appears to be aimed at appeasing holders of traditional water rights and common rights by setting out their duties and responsibilities in respect of the resources, and then giving the Government powers to intervene and regulate.  Not specific on who in Government.	++
31	The Executive Procedures shall spell out the cases when the Government may withhold the			+



	acquired rights of benefiting from waters, if public interest so dictates or if the rationing of water use is required, with fair compensation to be provided in accordance with the effective laws.			
<b>Issue 8 - Private sector participation and water services</b>				
36	No contractor can drill any new well, or replacement well, or any water structure unless the owner reveals a valid permit to do so, and the contractor should ensure that the contract between him and the employer conforms to the permit, and the contractor must show the permit when requested to do so.	Construction activities can only be undertaken if a valid permit has been issued by NWRA.		+
42	<p>Without prejudice to the Procedures for Classification of Contractors and Engineering Offices, such contractors and engineering offices shall be forbidden from undertaking any of the following activities without prior permit from NWRA accordingly:</p> <ol style="list-style-type: none"> <li>1. Drilling of water wells.</li> <li>2. Exploration for groundwater, execution of consultancy studies and works carrying out works in the field of water resources.</li> <li>3. Distribution of waterwell waters, whether directly or indirectly through private supply networks or by bottling it.</li> </ol> <p>NWRA shall issue or refuse the applications as such, in coordination with the relevant concerned entities.</p> <p>All natural or legal persons who are engaged, at the time of issuance of this law, in any of the activities indicated above must approach NWRA within one year from the date of issuance of this</p>		<p>Not clear whether contractors can operate public (i.e. Government or Ministry of Electricity and Water) water treatment and water distribution networks, or wastewater systems.</p> <p>Law of Local Authorities may provide clarification in this regard.</p>	+

	Law, to register their offices firms or companies and obtain their professional license to practice their occupation accordingly. The Executive Procedures shall spell out the fee required for their tenor, registration, rules, provisions and the procedures for the execution of this article and in such a way as not to violate the provisions herein stipulated.			
43	NWRA shall classify all natural and legal persons who are engaged in any of the occupations cited in the previous article according to their experience, as well as their technical, financial and human resources in accordance with the provisions of this Law and other applicable Laws.	Provides basis for contractor classification system.		+
<b>Issue 9 - Financing of institutions, tariffs and pricing system</b>				
73	The Executive By-Laws shows the rules and procedures related to licenses, permits and approvals which are issued in accordance with the provisions of this law, the tenors thereof, the amounts for the fees, charges and deposits which NWRA collects for them, as well as for the technical services provided by NWRA for others.	Provides for NWRA to levy charges.	Not clear if Executive By-Laws are the same as Executive Procedures.	+
75	The indemnity for any liability of damages incurred to water resources and the right of benefit, for which any material or health damage arises to third parties shall be borne by the person who undertook acts that were in violation of the provisions of this Law, which led to such damages accordingly.	Polluter pays for damages		++
76	Based on the proposal of NWRA thereto, and in coordination with the other relevant concerned entities, and in accordance with the legal procedures thereto, NWRA may impose fees, the proceeds of which will be allocated to support the		Rules and procedures to be set out in Executive Procedures, yet to be formulated.  Commercial Use of Water is	-

	<p>development of water resources and the protection thereof from depletion and pollution, and to work towards the fulfilment of the objectives of this Law, with such fees being the following:</p> <ol style="list-style-type: none"> <li>1 Water benefit registration fee.</li> <li>2 Water benefit fee for commercial uses.</li> <li>3 Water Resources Protection Fee against pollution from sewerage and commercial and industrial wastes.</li> <li>4 The Executive Procedures shall spell out the rules and controls for regulating the collection and spending of such fees.</li> </ol>		<p>defined in Article 2. 29) as “the distribution and conveyance of water for a price, in any manner for any use of a commercial nature, such as hotels, restaurants or any use other than for domestic or agricultural use accordingly.” This implies that there will be no charges for water abstracted for domestic or agricultural use, unless they are covered under the water benefit registration fee, which may have a volume related element.</p>	
77	<ol style="list-style-type: none"> <li>1) All charges, bonds and bonds/deposits, which NWRA collects for the permits, licenses and services it provides to others in accordance with the provisions of this Law, as well as the penalties imposed in accordance with the provisions of this Law shall go to NWRA. These funds shall be allocated for payments therefrom to support NWRA's operations and to improve its performance.</li> <li>2) The fees collected for services undertaken by the relevant concerned entities for third parties shall go to such entities. These funds shall be allocated for payments to support the operations of these entities and to improve their performance. The Executive Procedures shall spell out the rules and procedures for regulating the provisions of this article and in keeping with the Law of Local Authority and the other applicable effective laws..</li> </ol>	<p>NWRA to be financed from charges related to water resource management.</p>	<p>Rules and procedures to be set out in Executive Procedures, yet to be formulated.</p>	+