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NO 5

WATER QUALITY CONTROL COMMITTEE REPORT

NATIONAL WATER AND SOIL CONSERVATION ORGANISATION

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REPORT**

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WATER RESOURCES COUNCIL

I am pleased to submit the report of the committee convened by the Water Resources Council in August 1975 to review the basis that should be adopted for the control of water quality.

B W SPOONER

**Chairman
Water Quality Control Committee**

October 1976

FOREWORD

Following a Supreme Court decision in 1975, when it was concluded that the Water Resources Council had not been classifying water in accordance with the law, council set up the Water Quality Control Committee to review the basis that should be adopted for the control of water quality.

In October 1976, the Water Quality Control Committee completed its task, whereupon the council decided to refer the report to regional water boards for comment before making a decision.

In September 1977, the council reconvened the committee for a final meeting to discuss the comments of the regional water boards. Representatives of the Catchment Authorities Engineers Association were invited to partic-

ipate and with the exception of a few minor amendments to Sections 10 and 11, the full context of which are contained in Appendix B the conclusions and recommendations in this report remained unchanged.

On the recommendation of the council, the National Water and Soil Conservation Authority has agreed to the implementation of the conclusions and recommendations in this report by revising existing water and soil legislation. The authority was, however, not in favour of piecemeal amendments to the existing statute, and has asked that the conclusions and recommendations of the report be concluded in the revision of water and soil legislation, now in hand.

April 1978

1. INTRODUCTION

At its meeting on 14 August 1975 the Water Resources Council resolved to establish a committee to review the basis that should be adopted for the control of water quality. Membership of the committee was Messrs B.W. Spooner (Chairman), G.H. Glazebrook, R.R. Harcourt, J.L. Vickerman and W.M. Duncan.

This report presents the considerations, conclusions, and recommendations of the committee to the Water Resources Council.

2. ORIGINAL CLASSIFICATION PROGRAMME

In April 1972 the Water Resources Council was constituted under the Water and Soil Conservation Amendment Act (No 2) 1971 with classification of natural water as one of its functions. At its inaugural meeting the council resolved, in respect of classification of water that it:

- 2.1 adopts in general the previous criteria for water classification (ie the criteria contained in the regulations to the repealed Waters Pollution Act 1953) but requires that water of a higher natural standard and which is of significant scenic recreational or other high quality use be classed at a standard higher than (class) D.
- 2.2 adopts the guidelines that the SE class should be used only in special circumstances such as:
 - 2.2.1 water remote from the shore in circumstances where no other public use of the water is encroached upon or threatened, or,
 - 2.2.2 water adjacent to a shore to which the public does not have ready overland access and which it does not regularly use.
- 2.3 adopts the following policy:
 - 2.3.1 the council maintains that all water in the country is a national asset and is for the benefit and use of the country as a whole. Although certain river beds and shorelines may be privately owned the water itself does not belong to any private or public organisation;
 - 2.3.2 the quality of water throughout the country should be suitable for all the legitimate uses in the area;
 - 2.3.3 the council is totally opposed to the giving over of any water to the exclusive use of industrial waste or domestic sewage disposal. This implies that no water is to be regarded as an open sewer.
 - 2.3.4 the council maintains that there is a standard of water quality and aesthetics below which no water should

be allowed to fall irrespective of any particular existing usage;

- 2.3.5 the council maintains that water pollution control is a part of doing business of any industrial establishment or farming enterprise and is also one of the prime responsibilities in local government administration.

- 2.4 adopts the target date of 1975 for the completion of classification.

It was on the provisions within the Water and Soil Conservation Act and on this adopted policy that the programme of water classification was undertaken. By May 1975, 23 final classifications covering 27% of the country and 6 preliminary classifications covering 23% of the country had been completed.

3. BASIS OF CLASSIFICATION PROGRAMME

There were three main changes to the classification provisions when they were incorporated in the Water and Soil Conservation Act.

- 3.1 The preamble of the Waters Pollution Act 1953, under which the regulations relating to the classification of water were made, had the narrow objective of making "provision with respect to the prevention or mitigation of pollution of waters".

The objective in the preamble to the Water and Soil Conservation Act 1967 is much wider and includes:

- 3.1.1 promoting a national policy in respect of natural water;
 - 3.1.2 making better provision for the conservation, allocation, use and quality of natural water;
 - 3.1.3 promoting and controlling multiple uses of natural water; and
 - 3.1.4 ensuring adequate account is taken of the needs of primary and secondary industry, water supplies of local authorities, fisheries, wildlife habitats, and all recreational uses of natural water;
- 3.2 The permitted application of the various classes of water quality standards was specified in the Waters Pollution Regulations 1963 as:
 - Class A, being (inland) water — supply waters in a controlled catchment area;
 - Class B, being (inland) water — supply waters in an uncontrolled catchment area;
 - Class C, being (inland) waters to which the public have ready access and used regularly for bathing;
 - Class D, being inland waters in classified areas not included in any of the foregoing classes;

Class SA, being (coastal) waters for which edible shellfish are regularly taken for human consumption;

Class SB, being (coastal) waters to which the public have ready access and use regularly for bathing;

Class SC, being coastal waters to which the requirements of the seventh schedule are applicable.

Class SD, being coastal waters to which the requirements of the eighth schedule are applicable.

In the Water and Soil Conservation Act 1967 application of the classes was stated merely as, in respect of any water other than coastal water, one of the four classes A, B, C or D, and in respect of any coastal water, one of the five classes SA, SB, SC, SD or SE.

- 3.3 No purpose was explicitly given for the classification of water under the Waters Pollution Regulations but a basis of public use was implicit. Under the Water and Soil Conservation Act the purpose of classification was stated to be a declaration of the minimum standards of quality at which the natural water so classified shall be maintained in order to promote in the public interest the conservation and the best use of that water.

These then were the main changes to the classification provisions. However, the requirements of the various classes were retained with minor amendments, presumably because the requirements suited the needs of the various uses for which they were designed.

After consideration of the similarities and dissimilarities between the classification provisions in the Regulations and under the Act, council resolved to apply the classes in a similar manner to that which the regulations had provided, but with an extended use of the higher classes in view of its understanding of the meaning of S26H in the Act. Contrary to some recent criticism, it resolved to do this after full consideration of the statutory provisions both old and new. Up until May 1975 considerable progress had been made in preparing classifications throughout the country with either final or preliminary classifications covering 50% of the country.

4. APPEAL BOARD DECISION

Final classifications prepared for the Bay of Islands and for Southland were appealed against by various appellants. As this was the first case heard by the Town and Country Planning Appeal Board it considered, in its decision, the principles to be followed in making classifications under the provisions of the Water and Soil Conservation Act.

A full appreciation of the Appeal Board's decision requires a thorough reading of the

decision, however its main conclusions were as follows:

- 4.1 "The criteria adopted by the respondent as the basis for classification are inadequate and do not accord with the intent and requirements of the Act".

- 4.2 "... The classification of water is:

- (a) an aid to the preservation of those waters in good condition so that the waters may be used to best advantage; and
- (b) a guide to the suitability of waters for particular purposes and functions."

- 4.3 "A classification is essentially a declaration of a minimum desired water quality (which) may be the actual present quality of the water being classified, or it may be a higher or lower quality. If it is a higher quality it must be a quality which is achievable by the control or abatement of pollution and/or by the regulation of the activities carried on upon the land."

- 4.4 "If the existing quality of the water is found to be high then the classification should reflect that existing quality, unless it is demonstrated that in the public interest there should be freedom to lower the quality in the future."

- 4.5 "If the existing quality of the water is low, then an inquiry should be had into the cause of the low quality. If the cause is found to be "pollution" and if the public interest requires that the quality of the water should be raised... then the classification should ideally reflect such higher desirable quality as is achievable through the abatement or reduction of "pollution";..."

5. SUPREME COURT DECISION

As a result of the Appeal Board's decision the Water Resources Council asked the Appeal Board to state a case to the Supreme Court asking whether the board was correct in law in its determination of the principles relevant to the classification of water. The Judge issued a lengthy decision and once again for a full appreciation of it a careful and thorough reading is required.

He observed that:

- 5.1 "In the 1971 provisions the terms — discharge of waste — is used instead of — pollution —. That indicates a wider concept but not I think a radically different one considering that —waste— is defined in terms of potential for contamination.

- 5.2 "It is noteworthy that the Regs. did not refer specifically to surveys and the like in respect of water *quality*, but only in respect of waters *pollution*; so once again there is some extension of the concept."

- 5.3 "That section (ie S26H) had no counterpart in the old Regulations. It is the vital

section for the questions about classification principles..."

and he concluded that:

- 5.4 "Neither the board's approach nor the the council's approach is enjoined by the Act in express terms."
- 5.5 "Broadly speaking the main considerations as well as existing water quality are uses and discharges, existing and future, and their effects on water quality,... The fact that waters are in class SD, for example, is meant to be as much a guide to all concerned as is the fact that waters are in class SB. In short the Act does not contemplate a residual class comprising waters not obviously to be placed in some other class."
- 5.6 "To consign large sections of the waters in the various regions to classes which may be lower than the existing quality, leaving the various Regional Boards to decide in individual cases to what extent, if at all, standards above the minimum will be aimed at, would be the antithesis of a national policy."
- 5.7 "I hold that it will be in accord with the purposes of the legislation to follow, in general, the principle that waters should not be classified below their existing quality unless it can be foreseen that in those waters there will probably be discharges or uses which should reasonably be accommodated there and which – notwithstanding all reasonable safeguards, controls or treatment – are likely to lower the quality significantly."

6. EFFECT OF THESE DECISIONS

The result that the basis of classification followed by the council was not in accord with the Act, led council to cancel all final classifications that were subject to appeal, apart from the Bay of Islands and Southland classifications, and all the preliminary classifications.

The council also set up a committee to review the basis that should be adopted for the control of water quality.

7. STUDIES OF THE COMMITTEE

The committee in reaching its recommended proposals studied the question in three parts. viz:

- 7.1 The basis provided by the Supreme Court's decision.
- 7.2 The various alternative forms of indicative planning and control for the management of water quality.
- 7.3 The recommended steps necessary to implement the preferred method of water quality management.

8. PRESENT BASIS OF CLASSIFICATION

When considering the basis provided by the Supreme Court's decision one of the main problems apparent to the committee was that, based on the existing water quality or on desirable higher or lower standards, a classification must have detailed regard to individual discharges of waste, both existing and foreseeable, and to their dispersion, quantity, quality and effect on the receiving water. In the past these detailed considerations have been considered upon the application for a water right, not in the classification process. There would now be duplication of consideration of these matters by both the classification process and the water right process. Furthermore many of these detailed investigations for classification purposes would be of no future use and indeed such detailed investigations would in most circumstances be inappropriate at the state of classification because:

It comes at an earlier period in time when proposals for future waste discharges are not well defined and the studies cannot be conducted in the same depth that is possible when a water right application identifies an intended waste discharge in specific details.

The time required to execute a classification would be greatly prolonged and consequently detrimental in a situation where a regional water board wished to establish a legally based framework within which to resolve pressing and conflicting multiple use demands upon a receiving water.

A third problem also apparent was the definition of the term existing water quality and its determination.

The state or condition of a river, lake, or stream can be characterised by a combination of physical, chemical, biological, and bacteriological parameters. Such a combination can be referred to as the "water quality" of that water body. The selection of parameters available is, to a large extent, dependent on the purpose of the water quality investigation; what may be an adequate quality description for one purpose might be quite unacceptable for others. Because water under natural conditions is subject to quite wide variations in those properties we use to describe its quality, it is not possible to arrive at a reasonably uniform and precise table of parameters of quality of an existing body of water.

Therefore the idealised concept that existing water quality should be preserved cannot, in practice, be applied beyond a conceptual type of approach related to suitability for use. Even in the absence of other considerations the committee holds the view there is no workable means of giving an adequate definition of existing water quality to support a strategy of protecting a condition which appears to exist.

Having used a set of parameters to characterise a water body at any one time, the problem arises that this "water quality" varies with time (or distance). The variations can be due to the discharge of waste into the water, but also, and more importantly, variations in water quality occur naturally in water bodies not subject to any waste discharges.

The committee agreed that the present classes are, by design, for the protection of public uses of the water and can not be used to describe the existing quality of water. The committee considered that it would be unmanageable to describe all the variations of "existing water quality" by groups of parameters in a series of classes.

It considered that "existing water quality" should not be a prime basis on which to formulate a classification.

Resulting from its review of the Supreme Court decision the committee decided the objective of classification was properly that of the management of water quality rather than the narrower viewpoint of the control of polluting discharges. It also considered that it is untenable to believe that water can be isolated from other resources and controlled by a strategy, related to preserving a condition 'because it exists'. However it considered that the provisions allowing the Town and County Planning Appeal Board to revise whole classifications and evolve general principles on which classifications should be based, are not acceptable.

9. ALTERNATIVE METHODS OF WATER QUALITY MANAGEMENT

When considering the various techniques for the management of water quality the committee examined the following five methods.

9.1 Voluntary agreements

This method of water management can be used in the absence of legally enforceable powers with the authorities and waste dischargers making decisions about waste treatment. The method would allow for variations in procedure, with the authorities insisting on certain types and degrees of treatment based on the best interests of the persons living near a receiving water. An advantage of such a procedure is its flexibility but the great disadvantage is that waste dischargers will not always abide by such a voluntary abatement code. The former Pollution Advisory Council is an example of a body that initially used this method to effect water pollution control.

9.2 Effluent Standards

A more rigid system of management is that dependent on effluent standards which requires that, for all effluents from a certain type of industry, or size of population, or into a certain body of receiving water, the waste discharges is to be kept below either a fixed

percentage of the raw waste load or a certain maximum concentration of polluting matter, eg 80% removal of BOD; or 30 mg/l BOD. The disadvantage of this approach is in not controlling the total volume of waste allowed to be discharged.

The effluent-standard system is easy to control and administer since only the individual effluent discharges are required to be monitored for compliance. This system does not provide for the protection of public water uses nor does it take into account the assimilative capacity of the receiving water. Standards for effluents are based more on economics, and the practicability and availability of treatment processes. The application of effluent standards has no regard to the location of an industry or municipality and has no regard for the circumstances relevant to each case.

In Britain effluent standards of 20 mg/l BOD and 30 mg/l as with at least a 1:8 dilution of the effluent has been the basis of effluent standards.

Since the passing of Public Law 92.500 in the United States in 1972, water quality management has changed from the stream by stream system as the principal tool to the adoption of uniform national effluent limitations based on technology. Industries are required by 1 July 1977 to use the best practicable control technology currently available (interpreted as secondary treatment or equivalent). By 1 July 1983 industries are required to use the best available technology economically achievable (interpreted as tertiary treatment or equivalent) to meet the required effluent reduction. These required effluent reductions are promulgated by the Environmental Protection Agency as effluent limitation guidelines for each type of industry, whether or not the discharge is into a small stream, a large river, a lake, an estuary or harbour, or into the ocean.

9.3 Receiving Water Standards

The receiving water standard system is based on establishing classifications and standards of quality for a receiving water and regulating any discharge into it to the extent necessary to maintain the established classification. The primary motive of the classification is to protect and preserve each body of water for its best use on an equitable basis.

The main advantage of the classification system based on water use is the prevention of excessive pollution in the water and the placing of resources where they are most needed. It gives more flexibility and direction on the location of outfalls and the quality of effluents to municipalities and industry, than does the method based on effluent standards.

The total polluting load is limited to what the water can assimilate, and with this method of management industry and municipalities know the conditions for which they must design their waste treatment plants.

9.4 Financial Measures

Another method of water quality management is to financially assist industry and municipalities in the construction and operation of wastewater treatment plants, with the objective of improvement of a water resource. This assistance would take the form of subsidies or low interest loans granted by the State to encourage investment in wastewater treatment works, by industry and municipalities. The rules of a country governing the granting of subsidies and loans will affect the distribution of money for waste treatment plants. In the United States the Federal subsidies available, through the Environmental Protection Agency, have not kept pace with demand.

Other measures would be allowing accelerated depreciation on plant, tax exemptions for industries installing and operating plants and direct or indirect grants.

9.5 Pollution Charges

In countries such as France and the Netherlands the main instrument of water management is the pollution charge. This is not a charge which pays for a service rendered, but rather a charge which is collected as a "permit" to discharge polluted effluents and relates to the cost of using the environment for waste disposal. When charges are levied they have a two-fold economic effect; they provided a basis for allocating the expenditure on waste disposal and they are a direct incentive to the user to minimise his liability.

An assessment basis for charges can be on either a quantitative or qualitative basis, but the choice must be made carefully because the incentive effects of the financial charges will depend on it. Trade waste charges currently used incorporate both aspects.

10. CONCLUSIONS

The committee concluded from all these considerations that the present interpretation of the Water and Soil Conservation Act did not give an effective system for water quality management.

It considered that the use of the classification system under the present legislative interpretation is not necessary because in the meantime adequate control over polluting discharge is provided by a water right granted under Section 21 of the Act.

It considered that the objective of water quality management is to protect water uses

in their widest sense and that it is logical to prepare a plan of control principally in terms of the uses of the water since they reflect the aspirations and desires of the public.

It concludes that water quality should be managed on the basis of the protection of water uses with adequate provision being made for preserving the quality of particular bodies of water. This would take the form of a factual water use plan outlining existing and proposed future uses, with water quality requirements in regulations being associated with each use. The desire to conserve a particular body of water because of its scenic or scientific values can then be expressed and formalised within the use concept as they must ultimately relate to their usefulness for man.

11. RECOMMENDATIONS FOR A REVISED BASIS FOR CLASSIFICATION

When considering the third part of its studies concerning the necessary steps to implement its preferred method of water quality management, the committee concluded that amendments to the Water and Soil Conservation Act were necessary to ensure that:

- (a) the protection of public uses is the principal basis for classification;
- (b) regional water boards are given the function of classifying water;
- (c) objection and appeal provisions are amended to closely parallel the present Town and Country Planning procedures; and
- (d) water quality requirements for various uses are contained in regulations to the Act.

In order to indicate the kind of amendments to the existing Water and Soil Conservation Act that these recommendations imply, the committee has suggested specific draft amendments to sections 26A to 26H inclusive and to sections 13, 20, 21, 24 and 25. A draft of these amended sections is attached as Appendix A, but it should be remembered that the draft has been produced merely to give more detail to the general conclusions of the committee and it does not purport to be legally correct.

Water quality requirements to be included in the regulations to the Act should be the subject of further consideration after expert technical advice has been sought.

APPENDIX A

DRAFT AMENDED SECTIONS IN WATER AND SOIL CONSERVATION ACT

SECTION 26A : INVESTIGATIONS

1. The Authority, the Water Resources Council, or any regional water board within its region, may from time to time carry out investigations for the purpose of ascertaining in any locality –

- (a) The extent of any discharges of waste into natural water.
- (b) The cause, and effect of such discharges of waste.
- (c) The number of places from which waste is discharged into natural water.
- (d) The type and amount of waste being discharged from any places into natural water.
- (e) The persons or authorities by which any such places of discharge are controlled.
- (f) The uses for the time being made or likely in the future to be made of any natural water.
- (g) The extent to which any discharges of waste into natural water should be controlled or abated.
- (h) Any other information considered necessary for the purpose of preparing a classification.

2. Any such investigations may be carried out at the request of any person or authority having an interest in the protection of public uses of the natural water or the control of and discharges of waste or by the Authority, Council, or Board of its own motion.

SECTION 26B : POWERS IN RESPECT OF INVESTIGATIONS

1. For the purpose of carrying out any investigation under section 26A of this Act the Authority or Water Resources Council or a Regional Water Board or any person authorised specially or generally in that behalf in writing by the Authority or Council or that Board may make investigations in respect of public uses of natural water and discharges of waste into natural water, and may for that purpose –

- (a) Same.
- (b) Require any person to furnish such information as may be reasonably necessary in respect of the uses of natural water and the discharge of waste into natural water.
- (c) and rest of section – Same.

SECTION 26C : CLASSIFICATION OF NATURAL WATERS

1. The regional water board may, after considering any investigation carried out under

section 26A of this Act in respect of any natural water, classify that natural water in accordance with sections 26D, 26E, and 26F of this Act.

2. Every such classification shall specify the natural water to which the classification relates by reference to a map or plan attached to the classification.

- (a) Where any water other than coastal water is classified, it shall be classified as either –

Class G water, being water for general use purposes.

Class R water, being water for regular public bathing

Class S water, being water used for special scenic or scientific purposes, or public water supply from a controlled catchment; such water not receiving or likely to receive or be affected by any waste discharge.

Class W water being water used as a source for public water supply or for use in the preparation and processing of food for sale for human consumption.

The quality requirements for each class are specified in the ... Regulation 197 ... pursuant to this Act.

- (b) Where any coastal water is classified, it shall be classified as either –

Class DC water being limited open coastal water made available for substantially untreated waste discharge purposes.

Class EC water, being enclosed coastal water for general use purposes.

Class OC water, being open coastal water for general use purposes.

Class RC water, being coastal water for regular public bathing purposes.

Class SC water, being water from which edible bivalve shellfish are regularly taken for human consumption or water in which bivalve shellfish are cultivated or farmed.

The quality requirements for each class are specified in the ... Regulations 197... pursuant to this Act.

SECTION 26D : PREPARATION OF PRELIMINARY CLASSIFICATION

1. Where the regional water board proposes to classify any natural water in its region, it shall first obtain the consent of the Water Resources Council in respect of the need for, the nature of, and the extent of the proposed classification.

2. The board shall cause a preliminary classification to be prepared, publicly notified, and circulated in such manner as the board thinks fit to interested public authorities and other bodies, and to such persons as in the opinion of the board have an interest in the classification that is greater than the interest of the public generally.

3. The public notification of the preliminary classification shall call for objections to or submissions in respect of such classification to be lodged at a place stated in the notice, and shall specify a date, being not earlier than 2 months after the date of the public notification, by which any such objections or submissions must be so lodged.

SECTION 26E : OBJECTIONS AND SUBMISSIONS TO THE PRELIMINARY CLASSIFICATION

1. Any person or body detrimentally affected by the preliminary classification may object to the preliminary classification by giving to the board, at any time within the time specified in the public notice calling for objections, written notice of his objection and relief sought and stating whether or not he desires to be heard by the board in support of the objection.

1A. Any person or body likely to be affected by the preliminary classification may present submissions in respect of the preliminary classification by giving to the board, at any time within the time specified in the public notice calling for submissions, written notice of his submission, stating the grounds of his submission, and stating whether or not he desires to be heard by the board in support of the submission.

2. Not later than 2 months before the date on which any such objection or submission is to be considered or heard, the board shall publicly notify a summary of the subject matter of the objection and submission and an invitation to any person affected by the objection or submission to give written notice to the board, within 1 month after the date of such publication, stating whether they desire to support or oppose the objection or submission and stating whether or not they desire to be heard by the board.

3. The board shall consider any objections or submissions properly lodged and may hear or consider any evidence relating to such classification as it considers relevant.

4. In classifying any area of natural water the board with the consent of the Water Resources Council may, by adding the symbol X to the classification, indicate that the area of water in respect of which the symbol is added, is sensitive to enrichment, which may be prejudicial to public use.

SECTION 26F : FINAL CLASSIFICATION

1. The board, after considering the objections and submissions may then prepare a final

classification.

2. As soon as possible after a final classification has been made the board shall

(a) publicly notify details of the classification

(b) advise all objectors to the preliminary classification together with the substance of the reason for disallowance of any objection or submission;

(c) inform all public authorities responsible for discharging waste into the natural water comprised in the classification;

(d) advise the Water Resources Council and all other interested bodies known to the board and considered by it to have a substantial interest in the classification of the details of the classification.

SECTION 26G : APPEALS

1. Within 2 months after the date of the public notification of the final classification any party taking part in the process of the preliminary classification by lodging objections or submissions, or the Minister, National Authority or the Water Resources Council may appeal to the Town and Country Planning Appeal Board against that classification, and copies of any appeals lodged shall be notified to the Water Resources Council.

2. Every appeal under this section shall be made and determined by the Town and Country Planning Appeal Board in the manner prescribed by the Town and Country Planning Act 1953 and the regulations made thereunder, and subject to the provisions of that Act the decision of the Appeal Board on any such appeal shall be final and conclusive.

3. At the hearing of any such appeal the appellant or the Minister, National Authority or the Water Resources Council may be represented by counsel or otherwise and may call evidence on any matter that should be taken into account in determining the appeal.

4. The scope of relief that may be granted shall be limited to the affection determined on appeal.

SECTION 26H : EFFECT OF CLASSIFICATION

1. A final classification under section 26F of this section shall, subject to section 26G of this section, be a declaration of the present and likely future predominant public uses of the natural water so classified; and consequentially by reference to regulations pursuant to this Act a classification shall designate the quality requirements within which that natural water shall be regulated in order to protect those uses of that natural water and for the protection of aquatic life.

2. Provided that nothing in this subsection shall in any way limit or affect the provisions of subsection (3B) of section 21 of this Act.

3. Any reference in this Act or in any regulations or bylaws made under this Act or in any other enactment to the quality requirements of any natural water shall mean the quality requirements by which that water is to be regulated under this section by reason of its classification under this Act.

SECTION 14

13.3(o) To fix, after consultation with representatives of all interested bodies and persons known to the Authority, maximum and minimum levels, and the quality requirements to be sought or permitted for the natural water in lakes, both natural and artificial, and the minimum acceptable flow and the quality requirements of the natural water.....water:

SECTION 20

20.5(d) for 'minimum standards of quality' substitute 'quality requirements'
for 'minimum standard of quality' substitute 'quality requirement'.

SECTION 21

21.3 insertion prior to first proviso –

Provided that in respect of rights granted for the discharge of waste into natural water, the board shall specify in the terms and conditions of the right the effluent quality and may specify conditions relating to the provisions of, operation of, and maintenance of a specified plant or works.

21.3A

In granting any right under this section to discharge natural water or waste into any natural water, the board shall, subject to subsections 3 and 3B of this section, impose

such terms and conditions as may be necessary to ensure that:

- (a) After allowing for reasonable mixing of the discharge with the receiving water, the requirements of a classification are met.
- (b) The combined effect of the discharge under consideration and of all existing discharges and authorised discharges into the receiving water will not result in any failure to meet the classification.
- (c) Any discharge into water that is classified other than Class DC is substantially free from suspended solids, grease and oil as defined in the Schedule of the ... Regulations 197... pursuant to this Act.
- (d) No discharge of any undisintegrated waste is made into water that is classified DC.
- (e) No discharge of waste is made into Class S waters.

SECTION 24

24D.(2) The powers conferred on the Authority and every board by this section shall be exercised so as to maintain minimum levels, minimum flows, and the range of quality requirements of natural water...Act:

24I.1(c) Add any new terms or conditions to the permit – for the purpose of maintaining the quality of the receiving waters within the range of quality requirements of the classification.

SECTION 25

25(1)and copies of all appeals lodged shall be notified to the Authority.

25(3)and to the National Authority.

APPENDIX B

The following extract is the full text of Sections 10 and 11 which have minor amendments to those given on page 10 of the report:

“10. CONCLUSIONS

- (a) The committee concluded from all these considerations that the present interpretation of the Water and Soil Conservation Act did not give an effective system for water quality management.
- (b) It considered that the use of the classification system under the present legislative interpretation is not necessary because in the meantime adequate control over polluting discharges is provided by a water right granted under Sec 21 of the Act.
- (c) It considered that the objective of water quality management is to protect water uses in their widest sense and that it is logical to prepare a plan of control principally in terms of the uses of the water as they reflect the aspirations and desires of the public.
- (d) It concludes that water quality should be managed on the basis of the protection of water uses with adequate provision being made for preserving the quality of particular bodies of water. (This would take the form of a factual water use plan outlining

existing and proposed future uses, with water quality requirements in regulations being associated with each use. The desire to conserve a particular body of water because of its scenic or scientific values can then be expressed and formalised within the use concept but these values must ultimately relate to their usefulness for man.)

11. RECOMMENDATIONS FOR A REVISED BASIS FOR CLASSIFICATION

When considering the third part of its studies concerning the necessary steps to implement its preferred method of water quality management, the committee concluded that amendments to the Water and Soil Conservation Act were necessary to ensure that:

- (a) the protection of public uses is the principal basis for “classification”;
- (b) regional water boards are given the function of classifying water;
- (c) objection and appeal provisions are amended to closely parallel the present Town and Country Planning procedures; and
- (d) water quality requirements for various classifications are contained in regulations to the Act.”