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INFORMATION DIVISION . DEPARTMENT OF EXTERNAL AFFAIRS . OTTAWA, CANADA recent message to Congress wheat he said, "Every major reverleystem is now pointed" pour we arb not far benind; and I think It would be safe to say that!

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Vol. 20 No. 43	must dispose of weste materials. There is no que STNE
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Clean Water - A National Priority for Canada	-
Auto Prices Down as Predicted	, ,
Die Bood Dien for North	
Data Processing Studies	
Training Conference	1
Visit from NATO Students	-
Embassy for Addis Ababa	-

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First Eskimo NW1 Councillor	A
NRC Builds Model Heart	4
Chinaware Awards	5
Old Military Post Excavated	2
Health Desources Fund	3
Mail Service Increased	2
Labour Force	0

# CLEAN WATER - A NATIONAL PRIORITY FOR CANADA

Mr. John N. Turner, Parliamentary Secretary to the Minister of Northern Affairs and National Resources, recently addressed the First Paper Industry Conference on Water Conservation and Stream Improvement at Fort William, Ontario. The following is a partial text of his remarks:

... As far as our total water supply is concerned, We are one of the most fortunate nations on earth. The total flow of all our rivers has been estimated at about 2.5 million cubic feet per second, which is equivalent to about 70,000 gallons per day for every Person in Canada. Just compare this with our nearest neighbour, the United States, whose total river flow amounts to about 1.8 million cubic feet per second, Which is only a little more than 5,000 gallons per day for each person in the country. And even at that, the United States is fortunate compared with some

other nations in the world.

It is true that many of our Canadian rivers flow through relatively unpopulated territory, and are not of much use unless we can divert them to where they can be used. But the important fact is that we have

I am not suggesting for one moment that we should complacently look at these calculations and feel that We have nothing to worry about.

Population is not fixed. It is continually increasing, and as it increases, the per capita use of Water also increases; expanding industrial activity, added to an increasing domestic and municipal demand, keep forcing our total use closer and closer to the fixed amount supplied by nature.

As demand approaches supply, there are only two alternatives open to us - new sources of water, or a more effective use and re-use of the water we already have.

(Continued on P. 6)

Both these alternatives are still open to us in Canada. We are looking carefully at possible diversions south from rivers which now flow unused northward to the Arctic Ocean.

JOINT STUDY PROPOSED It was the Federal Government last year that proposed to the Provinces of Ontario and Quebec that we engage in feasibility studies of diversion of our northern rivers back into the Great Lakes system. Ontario has now agreed and we have inaugurated a joint study. I hope that the Province of Quebec will also see fit to join us. I am sure that some of these possibilities will some day become realities. But the availability of this fresh supply must not deter us from looking carefully also at the rivers which already flow through our populated areas, and making sure that their waters are used wisely. Waste of this most vital resource is inexcusable....

There are very few industries which do not use water in quantity, and there are likewise very few industries which do not have wastes to dispose of. Water is a very convenient carrier of waste products, and waste disposal is one of the most important uses of water. Every stream has a natural ability to cleanse itself when it is given a load of waste to carry. But there is a limit, and on many of our streams that limit has been reached. A stream must travel a certain distance before it can recover from the effects of receiving a quantity of waste material, and some materials it cannot cope with at all. As industries multiply in number, and municipalities increase in size, many of our streams have no chance to recover before being charged with a new load of effluent material, so that recovery never occurs, and the stream becomes a permanent sewer.

Quite aside from the aesthetic viewpoint (who can enjoy a dirty-looking or foul-smelling watercourse?), there are the questions of public health and the usefulness of the stream for others downstream. After all, every water-user on a stream (except one) is downstream from somebody else, and as the number of users on each stream increases, the problem increases for all.

We in Canada have, fortunately, not yet reached the condition described by President Johnson in a recent message to Congress when he said, "Every major river system is now polluted", but we are not far behind, and I think it would be safe to say that every major river system in the settled part of Can-

ada is polluted to some extent.

#### SOLUTION COSTLY

Is there any solution? Our industries and cities must dispose of waste materials. There is no question about it. But must we accept polluted streams as a corollary? I think not. Our scientists and engineers can tell us how to clean up our streams, perhaps not to the state they were in 100 years ago, but at least to a state which would not impair our health or offend our senses. The physical solution is available. The problem that remains is an economic one, and perhaps an administrative one. It costs money to treat waste water before discharging it to a stream. On the other hand, if waste water is not treated, the next downstream user must often treat it before he can use it. In effect, money spent upstream reduces the cost downstream. Who should spend the money? The upstream user before discharge? The downstream user before use (and again before discharge)? You see what I mean when I say the problem is an economic and administrative one rather than merely physical.

.. I am pleased to see an industry-widediscussion the problem, and I would like to see an even broader discussion involving other industries as well. For, make no mistake about it, pollution is a problem which must be solved, and if those who pollute our streams do not take the initiative in tackling the problem, other authorities will take the initiative. If industry doesn't do something about pollution soon, the people of Canada, through their

governments, will!

There is now less excuse for any industry to delay its anti-pollution programme. Not only is there the stimulus today of public awareness and national impatience, there is also the stimulus of tax relief. Largely at the instigation of the pulp and paper industry, I believe, the Government included in the last budget a provision of accelerated depreciation at the rate of 50 per cent on all capital expenditures related to the elimination of pollution. This should encourage installation of the best modern equipment. I should hope also that your industry would continue its reserach into improved methods of pollution control. In the last budget a deduction of 150 per cent of cost was made available for scientific research. It is my personal opinion that this 150 per cent deductibility available for research under the provisions of Sections 72 and 72A of the Income Tax Act would include research towards combating pollution ....

FEDERAL JURISDICTION

What is the Federal Government's responsibility? The administration of water resources in Canada is basically a provincial matter, and the pollution of those resources is likewise primarily a provincial matter. I might just give you a picture of the federal responsibility, mainly to emphasize the non-federal

or provincial responsibility.

The Boundary Waters Treaty of 1909, between Canada and the United States, requires that "boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other". Even here, the authority and responsibility for correcting such pollution rests with the province (or state) in which the pollution originates, but the International Joint Commission has been able to use its influence effectively in having remedial action taken where violations of the Treaty have been observed.

The Navigable Waters Protection Act restricts the discharge of materials into navigable waters or waters tributary to navigable waters. The type of material concerned here is that which would obstruct navigation channels, rather than offensive or other-

wise injurious materials.

The Fisheries Act similarly prohibits discharge of certain materials into streams; in this case the concern is with those materials injurious to fish.

The Migratory Birds Convention Act prohibits the deposit or discharge of "oil, oil wastes, or deleterious substances in any water frequented by migratory wildfowl".

The Department of National Health and Welfare Act requires enforcement of any rules or regulations made by the International Joint Commission "so far

as they relate to health".

The Department of Transport has regulations governing the discharge of wastes in public harbours, as does the National Harbours Board, based on the

Canada Shipping Act.

These statutes represent about the limit of the federal jurisdiction, except for the Criminal Code of Canada which, in its definition of a "common nuisance" as an act which "endangers lives, safety, health, property, or comfort of the public", provides a possible means of dealing with pollution. It has not generally been considered a useful means of dealing with pollution, however, mainly because of legal difficulties in proving the cause and locating the source of a common nuisance involving wastes.

#### PROVINCIAL RESPONSIBILITY

So you see ... the problem of water pollution is basically a provincial one. This is not to say that the Federal Government is not interested in or concerned with the problem. But it must act within its constitutional limits. That is to say, it must operate by assisting or encouraging the provinces to take the required action.

It has been my personal opinion for some time that the Federal Government must intervene to achieve provincial co-operation. We need a national resource policy. We need a co-ordinated policy for the development and management of our water, soil and air. We need national principles and concepts to guide us in

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# AUTO PRICES DOWN AS PREDICTED

The following statement was made on October 13 by Mr. C.M. Drury, Minister of Industry:

On September 30, I stated that we should see a progressive narrowing of the differential in prices of automobiles between Canada and the United States through the implementation of the Automotive Programme. I was, therefore, most pleased to note that the prices of 1966 model cars provide not only for a substantial narrowing of the differential but for appreciable decreases from the prices of similarly equipped 1965 model cars manufactured in Canada. General Motors has now announced suggested retail price reductions averaging \$73 per car. Ford announced reductions averaging \$62 per vehicle. At the same time, Chrysler has announced price reductions ranging from \$38 to \$126 per car. The companies have also announced price reductions for imported Cars. of oil 1900 Land altonion extiguomon desolo ent actings apprintendent of the

#### U.S.-CANADA DIFFERIENTIAL

With regard to the differential in prices between Canada and the United States, I mentioned in my statement on September 30 that the most meaningful comparison between prices is at the factory, excluding taxes and adjusted for differences in exchange. It is, of course, at this level, that the Automotive Programme influences manufacturers' costs and their resulting prices. I pointed out at that time that, on this basis, the average differential between Canadian and U.S. prices for the popular models of 1965 cars was somewhat less than \$150, or 8 per cent. The manufacturers' wholesale prices at the factory for 1966 cars show a significant narrowing of this differential, ranging from one third to one half for the three companies concerned. The remaining differential now ranges from 3.0 per cent to 5.0 per cent, compared with nearly 8 per cent for their high volume 1965 models. These figures illustrate that the benefits of the Automotive Programme in terms of relatively lower costs are being passed on to Canadian consumers. I am confident that, as the Objectives of the Automotive Programme are progressively achieved, this remaining differential of 3 to 5 Per cent will be eliminated. heart and transpose \*\*\* of signals that can be

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# BIG ROAD PLAN FOR NORTH

Mr. Arthur Laing, the Minister of Northern Affairs and National Resources, has announced a ten-year toad-building programme in the Yukon and Northwest Territories. The new programme, which has been under study for the past 18 months, calls for an average expenditure of \$10 million a year, double the annual investment for roads in the previous ten years. This is the first phase of a long-range, 20-year northern roads network programme that is to be undertaken by the Department of Northern Affairs.

In areas covered by the 20-year plan, the road network should bring every area possessing ex-Ploitable resources within 200 miles of a permanent road. Noting that Canada's North was moving into a new era of search and exploration, Mr. Laing said "adequate roads will provide the support needed to develop the resources of both the Yukon and the Northwest Territories". "The programme is of first importance for the Territories and for Canada as a whole," he added.

The roads to be built under the ten-year programme, including roads into the rich resource areas of the territories and highways providing communication between existing communities, will gradually reduce the dependence of the North on seasonal transportation for bulk shipments, lower the cost of holding large inventories, and bring the cost of living more in line with that of other parts of Canada. Another important benefit will be the greater accessibility of the North to tourists. radial sit, visit to a \* \* \* OTAL not beinessum

### lender Canada; the United States, diritain, France, DATA PROCESSING STUDIED

Senior civil servants from 15 countries recently spent 10 days in Ottawa studying mechanized dataprocessing in a course specially prepared for them by the Civil Service Commission of Canada. The Management Analysis Division of the Commission designed the course at the request of the United Nations. The officials will evaluate the material and recommend its use by the UN. Among the countries represented were Argentina, Mexico, Kenya, Iran and Greece.

The course consisted of 21 lectures by CSC staff and departmental experts, and visits to government departments.

#### TRAINING CONFERENCE

Mr. Allan J. MacEachen, the Minister of Labour, announced recently that a federal-provincial conference of ministers of labour and ministers of education was being planned for later in the year to discuss training programmes in designated areas and in industry generally. This conference, which was endorsed at the federal-provincial meeting last July, will consider the problem of training in industry in the light of broader developments in the fields of manpower and automation. The Minister said that training in industry was a matter of the greatest concern to employers, workers and governments.

#### CANADA-U.S. ILO MEETING

Mr. MacEachen also announced that next year Canada would be host for the first time to an American regional conference of the International Labour Organization. This conference, which will be held in Ottawa in September 1966, will be attended by about 200 delegates, representing employers, workers and governments, from north, south and central America and the Caribbean. The Minister of Labour said that it would be the first full-scale ILO meeting held in Canada since the period during World War II and the early post-war years when the ILO made its temporary home in Canada.

Mr. MacEachen said he expected that this conference would advance the development of manpower and social policy in all parts of the Americas.

#### VISIT FROM NATO STUDENTS

Sixty-nine students and staff members from the NATO Defence College, Paris, visited Quebec City and Ottawa recently as part of a two-week familiarization tour of North America.

Under the supervision of the college commandant, Lieutenant-General D.S. Fanali of the Italian Air Force, the visitors went first to Quebec City and, after a tour of the city's historical sites, flew to Ottawa, where they heard addresses on Canada's foreign and defence policies by the Assistant Under-Secretary of State, Mr. H.B. Robinson, and the Vice-Chief of the Defence Staff, Lieutenant-General R.W. Moncel.

The officers attending the six-month course represented the NATO countries of Italy, the Netherlands. Canada, the United States, Britain, France, Denmark, Turkey, Germany, Belgium, Greece and

At the end of their tour, the group went on to Washington, D.C., to visit defence establishments in the United States.

#### EMBASSY FOR ADDIS ABABA

Mr. Paul Martin, the Secretary of State for External Affairs, announced recently that Canada and Ethiopia would establish diplomatic relations. Canada plans to open an embassy in Addis Ababa, the capital of the East African nation. This step will strengthen the friendly relations that have long existed between Canada and Ethiopia. and administrative \* \* \* WHALIVED DIMINATE

## FIRST ESKIMO NWT COUNCILLOR

The Prime Minister announced recently the appointment of Mr. Abraham Okpik, 36, of Yellowknife, to the Council of the Northwest Territories. Mr. Okpik will be the first Eskimo ever to serve as a member of the Council; he is also the first resident of the Territories to be appointed since 1946.

The Northwest Territories Council at present comprises nine members. Five, including the Deputy Commissioner, are appointed and four are elected

by voters in the Mackenzie District.

Thirty-five per cent of the population of the Northwest Territories consists of Eskimos, the majority of whom have not previously had the opportunity to vote in territorial elections because they live outside present constituency boundaries. Plans have been announced, however, to create new constituencies in the Eastern Arctic and, when this has been done, the Eskimos will have the same voting rights in elections as the Indians who live in the Mackenzie District.

#### STEPS TO POPULAR PARTICIPATION

"The appointment of a resident of the Territories is one of a number of steps we have taken to enable the people of the Northwest Territories to have a greater part in the administration of their own affairs," the Prime Minister said. "Another was the establishment earlier this year of an independent commission to study and report on the development of government in the Northwest Territories. Our goal is the greatest possible delegation to the territorial government of the authority and responsibility now being exercised from Ottawa."

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Abraham Okpik, who was born near Aklavik in the Mackenzie River delta, is well known throughout the Arctic. He has worked as a labourer and foreman, and has written a number of articles in technical and professional journals on social and cultural changes affecting his people.

Mr. Okpik joined the Department of Northern Affairs and National Resources in 1959 as a translator and interpreter. The following year he was made programme director of the rehabilitation centre at Frobisher Bay, where he also became a member of the local community council. In 1964 he became

acting superintendent of the centre.

He is now working in Yellowknife, assisting Eskimo miners and their families from Rankin Inlet to adjust to life in an urban environment.

# NRC BUILDS MODEL HEART

An electric model heart, designed to reproduce all the electrical activity of the normal heart, has been built at the National Research Council in Ottawa. Fitted into a simulated human torso in the place occupied by the real heart, the device makes it possible to measure the effectiveness of electrocardiographs that are intended to monitor the electrical activity of the heart. The model was developed specifically to study the effectiveness of a sophisticated type of cardiograph built at NRC and called the area display ECG.

# RESEMBLANCE TO TV

This machine functions much like a miniature tele; vision station. Approximately 70 electrodes, placed round the chest, pick up electrical signals from the heart and transpose them into signals that can be televised and then photographed. In this way it is possible actually to see and photograph the results of a heart attack in a living person. It received encouraging evaluation results at Queen's University, Kingston, Ontario, where it was tested.

The new electric heart may be used not only to test this particular ECG machine but to give more exact assessment of the effectiveness of any of the many different types of ECG lead systems now

available.

So far, electric heart models have used mainly simulated heart energy, but this one reproduces

electrical energy put out by a real heart.

A normal heartbeat is tape-recorded and the magnetic record on the tape is "played back" in the form of electrical energy. Studies made so far indicate that the artificial electric heart closely reproduces the actual activity of the human heart.

# CHINAWARE AWARDS cost be neewed bas, securives

An official of the Department of Industry announced recently that Vandesca-Syracuse Limited, makers of china, in conjunction with the "Canadian Design '67" programme, was sponsoring a number of awards for original designs in china tableware. "Canadian Design '67", administered by the National Design Council and the Department of Industry, is a nation-wide programme initiated to encourage the development of Canadian products of superior with us, one which will always increase, a time

The awards will be known as "Canadian Design '67 Vandesca-Syracuse China Tableware Awards for the Best Designs Utilizing China". Cash prizes will help defray the cost of developing prototypes of products intended for commercial production.

The tableware-design awards programme is open to Canadian designers and manufacturers whose entries must be substantially designed and developed in Canada. If a design is from a non-Canadian source, it must have been commissioned by a Canadian manufacturer.

Products must be intended for manufacture in Canada, using chiefly Canadian materials and components. \*\*\*\*

# OLD MILITARY POST EXCAVATED

The remains of a British military post dating from the late eighteenth century, situated about 30 miles southwest of Montreal, are to be preserved by the Canadian Government. Mr. Arthur Laing, Minister of Northern Affairs and National Resources, said recently that the foundations of 14 buildings had been uncovered during the summer at Coteau du Lac National Historic Site, on the north shore of the St. Lawrence River. The foundations, which are well preserved, will be repaired and stabilized.

The post was built in the late 1770s to protect small boats passing the troublesome Coteau Rapids. During the War of 1812 it was of key strategic importance.

A three-lock canal, cut through rock, was completed in 1781 under the direction of Captain William Twiss of the Royal Engineers, to permit the passage of the famous flat-bottomed bateaux. Stores, maga-Zines and troop quarters were built at the same time.

An octagonal wooden blockhouse was added during the War of 1812, at which time a garrison was installed to defend the post and the canal. The stone foundation of this building is in an excellent state of preservation.

Barracks, storehouses, the commandant's quarters and further blockhouses were constructed early in the nineteenth century. The post was abandoned in 1851.

The foundations excavated so far date from several periods in the site's history. The canal has been partly cleared, exposing one of the wood lockgates at the western end.

# HEALTH RESOURCES FUNDAM A - METAW MASSIO

At the Federal-Provincial Conference last July, Prime Minister Pearson announced a proposal to establish a Health Resources Fund that would supplement the Government's medicare proposals. Its purpose was to support the construction and equipment of facilities for health research and training, and thus to help the provinces improve the quality of the medical care available to Canadians.

The Prime Minister recently made the further announcement that the Government would provide \$500 million to the Fund. "We propose" he said, "that the Fund take effect on January 1 next. Since long-term planning is essential to projects of the kind it will support, the resources of the Fund will be available over a 15-year period. This means that an average of about \$33 million will be available each year for the purpose of the programme."

"The basic purpose of the Fund," the statement continued," is to help meet the greater need for trained people to provide medicare services. Through the Fund, federal capital grants will be available for the construction, renovation and basic equipment of research establishments, teaching hospitals, medical schools and training facilities for other health personnel. Grants from the Fund will not be available to meet the operating costs of such establishments."

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# MAIL SERVICE INCREASED

Prime Minister Pearson recently announced an increase in letter-carrier delivery service that will bring mail deliveries to approximately 62,000 familes that have at present to collect their mail from local post offices.

The extension, which will affect up to 28 communities across the country, results from the Government's decision to reduce the minimum number of calls on which letter-carrier service can be based from the present requirement of 2,500 points of call to 2,000. The reduction had been recommended by Postmaster General René Tremblay.

The Prime Minister said that it had become increasingly difficult for the Post Office to provide efficient service through general delivery and postal "lock boxes" in communities with more than 2,000 points of call. Usually, he added, when a community had grown to that size, congestion developed in the lobby and at the general-delivery wickets and difficulties arose in mail-handling operations.

How soon the new service will be introduced will depend on local situations. Considerable preparatory work will be required - towns must be divided into letter-carrier "walks", staff must be trained to sort mail to these areas, accommodation must be provided and new equipment obtained, the public must provide mail receptacles, and houses must be numbered and streets named.

CLEAN WATER - A NATIONAL PRIORITY FOR CANADA

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the development of national resource policies, determined by the Federal Government and applied on a regional or provincial basis by the provincial governments. Resources know no boundaries. Pollution cannot be quarantined; it is contagious. It flows from one province to another. The Federal Government must not merely act as referee, it must now act as co-ordinator and must, on behalf of the people of Canada, bring provincial governments together by initiative and persuasion into co-ordinated national policies. The said Alcheg they are the town distallant and archeringer of thoughts seatted will openevaluate

### COUNCIL OF MINISTERS

One way to achieve this is through federal membership in the Canadian Council of Resource Ministers, an 11-member Council consisting of one minister from each of the provinces and the Minister of Northern Affairs and National Resources from the Federal Government. This Council (arising out of the "Resources-for-Tomorrow" Conference called by the Federal Government in 1961) is now in the process of organizing a national conference to be held in October 1966 on the topic "Pollution and our Environment". The subject was put on the agenda by the Federal Government. The conference will, incidentally, include air and soil pollution as well as water.

As a result of this conference, which it is hoped will be attended by representatives of federal, provincial and municipal governments, as well as industry, we hope to see the formulation of improved programmes for pollution reduction. This is not to imply that present provincial programmes are inadequate. Some provinces are making great advances in measures for dealing with pollution of their waters, but as you are probably aware, there are differences in policies and methods of approach among different munities across the reducty, hesetta from the Coverno

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provinces, and between adjacent provinces. A chance for all to get together to compare and discuss their administrative, legislative, and financial problems can be of great value to all.... makers of chinacian conjunction with the

## A NATIONAL PROBLEM

For it is the whole country which must be concerned with the pollution problem. No part of it is immune. True, water pollution is more acute in certain areas of high population density and high concentration of industry. But it is a problem which will always be with us, one which will always increase, and one which will spread as our land area is increasingly occupied. As I stated earlier, there is no resource more vital to our nation's future than water, and I would venture to say, no problem more pressing or of higher priority in the wise use of our water than the control of its pollution. I can think of no use of water which can damage it for other uses to a greater extent than waste disposal. We must not damage our water resources beyond repair, and I think it is becoming increasingly apparent that the time and place to prevent the damage is before it occurs rather than to try to cure it after it occurs....

#### LABOUR FORCE

The Dominion Bureau of Statistics reports that the labour force in Canada declined by 331,000 to 7,159,000 during August and September as large numbers of young people returned to school. Employment decreased by 296,000 to 6,983,000 in the same period. Unemployment dropped by 35,000 during the month to 176,000.

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During August and September, the decrease in employment of persons 14 to 24 years of age amounted to 338,000. Employment among persons 25 years of age and over increased by 42,000.

The labour force in September was 174,000 higher than a year earlier. Employment was 215,000 higher and unemployment 41,000 lower than in September 1964. \* Abdress weero Demonstrator and Smisser whood limits

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