

DEVELOPMENT OF RESOURCES  
AID OF ECONOMIC OPPORTUNITY  
IN THE PACIFIC NORTHWEST

NATIONAL RESOURCES PLANNING  
BOARD

1942

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**DEVELOPMENT OF RESOURCES  
AND OF ECONOMIC OPPORTUNITY  
IN THE PACIFIC NORTHWEST**

**OCTOBER 1942**

**NATIONAL RESOURCES PLANNING BOARD**

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**DEVELOPMENT OF RESOURCES AND OF  
ECONOMIC OPPORTUNITY IN THE  
PACIFIC NORTHWEST**



**REPORT OF THE  
PACIFIC NORTHWEST REGIONAL PLANNING COMMISSION  
TO THE  
NATIONAL RESOURCES PLANNING BOARD**

**UNITED STATES GOVERNMENT PRINTING OFFICE**

**WASHINGTON : 1942**

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EXECUTIVE OFFICE OF THE PRESIDENT  
NATIONAL RESOURCES PLANNING BOARD  
WASHINGTON, D. C.

OCTOBER 29, 1942

The PRESIDENT,  
*The White House.*

MY DEAR MR. PRESIDENT:

We have the honor to transmit herewith a report of the Pacific Northwest Regional Planning Commission to the National Resources Planning Board on "Development of Resources and of Economic Opportunity in the Pacific Northwest."

The war program is making increasing use of the rich resources of this region and speeding the process of its development through the construction of new industries and the migration of war workers to augment its comparatively small population. At the end of the war the resources of the area will present many opportunities for converting its new factories, facilities, and skills to peacetime economic development.

Since 1934, the Pacific Northwest Regional Planning Commission has been working to bring about the planned development of the region and the integration of the individual plans and programs of the many agencies and groups concerned with resource use. In 1938, at your direction, we requested the Commission to undertake the preparation of plans for public works for the region beginning with a study of land and migration problems.

The series of studies undertaken and embodied in this report are:

- Part I. The Region
- Part II. Agricultural Land Development
- Part III. Industrial Development
- Part IV. A Plan and Program for Regional Development and Internal Improvement

Foresight during the previous decade in developing power resources of the Columbia Basin through construction of the Bonneville and Grand Coulee facilities and their linkage in a regional grid greatly increased the contribution made by the region to the war effort. The plans presented in this document will aid that contribution and indicate the opportunities for post-war development of the Pacific Northwest.

Sincerely yours,

FREDERIC A. DELANO, *Chairman.*  
CHARLES E. MERRIAM.  
GEORGE F. YANTIS.

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<sup>1</sup> Vice Walter C. Clark, 1941.

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# DEVELOPMENT OF RESOURCES AND OF ECONOMIC OPPORTUNITY IN THE PACIFIC NORTHWEST

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Acknowledgment is made herewith to the following agencies for use of photos in various figures:

**FIGURE 1:** The Farm Security Administration; the Bureau of Reclamation, U. S. Department of the Interior

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**FIGURE 36:** West Coast Lumberman's Association; Weyerhaeuser Timber Co.; *The Timberman*; Pacific Power and Light Co.; Northwestern Electric Co.

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# PART I

## THE REGION

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### SUMMARY OF BACKGROUND REPORT

### MIGRATION AND DEVELOPMENT OF ECONOMIC OPPORTUNITY IN THE PACIFIC NORTHWEST, 1939\*

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Advisory Committee for Study: Land Advisory Committee—W. H. Horning (Interior Department), Colonel John C. H. Lee (Corps of Engineers), H. E. Selby (Department of Agriculture), *Steering Committee*; E. H. Alcher, F. L. Ballard, F. E. Balmer, F. A. Banks, F. H. Brundage, L. L. Bryan, J. H. Christ, Earl B. Day, Merle L. Drake, W. A. Duffy, A. E. Edwards, R. S. Erb, C. E. Greider, Thomas Horsford, E. J. Iddings, E. C. Johnson, Clyde McKee, Orlo H. Maughan, H. A. Parker, A. D. Ryan, W. A. Schoenfeld, John Shepherd, E. T. Taylor, J. C. Taylor, O. C. Upchurch, *members*; George F. Yantis (Chairman, pro tem), R. F. Bessey (Consultant), Sinclair A. Wilson (Chairman, Land Resources Division, PNWRPC). Population Subcommittee—W. A. Duffy, R. S. Erb, Charles F. Ernst, Elmer Goudy, S. D. Hays, Thomas Horsford, T. S. Kerr, P. A. Parsons, R. R. Renne, Calvin Schmid, L. C. Stoll, Paul Taylor, Nathan Whetten, *members*.

Summary prepared by Virginia Fox Hartley of NRPB staff.



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NATIONAL RESOURCES PLANNING BOARD

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### Acknowledgments

The body of the following report was prepared in 1941 by the staff of the Regional Planning Commission. The study was under the immediate direction of and the report was drafted by Blair Stewart, Consultant. Dr. Stewart was assisted by James E. Maxwell, Associate Economist.

In accordance with a memorandum of understanding between the Bonneville Power Administration, the Northwest Regional Council, and the Regional Planning Commission, looking toward cooperation in economic and industrial studies of the region, contributions to this report have been made by representatives of those agencies, including Ivan Bloch and Samuel Moment of the Power Administration and John B. Appleton of the Council. Very valuable suggestions have also been made by them as a result of their review of the drafts.

Other persons who have been kind enough to review the report in draft form and offer valued suggestions are: R. W. Cowlin, William H. Crawford, William E. Folz, Robert C. Gilles, R. B. Hefebower, P. Hetheron, Dorothy Johansen, B. H. Kizer, E. B. MacNaughton, Walter W. R. May, Charles McKinley, Dale Pontius, R. R. Renne, J. C. Rettie, Albert L. Seeman, Warren D. Smith, Stephen N. Wyckoff.

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<sup>1</sup> Until July 1941.

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## PART III

### FOREWORD

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The relative immaturity of the economy of the Pacific Northwest—with its emphasis on the extraction of farm, forest, and mineral materials and its deficiency in manufacturing activity—has been emphasized in many economic studies of the region. A broadening of processing and manufacturing industries has been considered as a major regional need, and one of the fundamental means of providing economic opportunity for persons migrating to the region. It would be a prime factor in providing for a better utilization of material, labor, and technical resources, supplying an essential offset to diminishing activity due to resource depletion in certain areas and would, therefore, be a means of improving and stabilizing employment, income, and living standards. The expansion and broadening of industrial activity are also large factors in the use of regional resources for national defense, as well as in their later use in post-emergency readjustment and progress.

In building for enlarged economic opportunity for a greater regional population, through more stable employment and higher living standards, it is apparent that the region's economic base must be broadened and strengthened. The structure of employment in the Pacific Northwest rests largely on two basic supports—those of agriculture and forestry. These two supports lack stability. The major forest product, lumber, is a durable good and excessively sensitive to changes in business conditions. Agriculture is subject to weather hazards and to severe price fluctuations, which result in great variations in the income of the agricultural population. The superstructure of service employment suffers from the instability of its supports. Greater stability can be attained, and added economic opportunities provided, only if the forest and agricultural supports can be strengthened and their permanence insured, and new basic activities added.<sup>1</sup>

Production and employment in the forest industries in their present forms give little promise of net expansion. Indeed, unless there is accelerated progress in waste elimination and in the development of activities based upon the forest resource, but providing greater and more stable employment, there may be a significant

regional decline (as well as severe subarea depressions) in this field a decade or two hence.<sup>2</sup>

The survey of potential economic opportunity through land development,<sup>3</sup> which is a companion study to this of industrial development, shows immediate prospects in the Pacific Northwest for the development of approximately 2.3 million acres of agricultural land through irrigation, clearing, or drainage. About one-third of this will be developed primarily to benefit existing farms, and thus increase the security of farm income. The remainder will be available for about 21,000 new farms. A large proportion of these farms will be irrigated, and therefore less subject to weather hazards than nonirrigated land. The result should be a broader and somewhat more stable agricultural base.

With respect to Pacific Northwest industrial development, the ensuing report reviews, in condensed narrative and statistics, the historical trends, the present situation, and the future prospects.

The economic development of the Pacific Northwest has advanced in fairly well-marked stages. Exploitation of a natural resource featured each stage. The limit of expansion based on some of these resources has been reached and passed; for others, it may not be far ahead.

After forests, the most distinctive natural resource of the Pacific Northwest—its hydroelectric power, 12 percent of the national total installed capacity in 1939 and 40 percent of the potential capacity of the country—is just now beginning to make a deep impress on the regional development and economy. The situation with respect to this power and to industry in the Pacific Northwest is unique. Good power sites are found on many streams and in the Columbia River and its tributaries is one of the greatest sources of energy in the world. Because of the magnitude, low cost, and concentration of this energy within a well-defined region, it is peculiarly suited to use by electrochemical and the electrometallurgical industries—activities that are becoming more and more important as the needs for light metals, alloys, and heavy chemicals increase.

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<sup>1</sup> *Migration and the Development of Economic Opportunity in the Pacific Northwest*, Pacific Northwest Regional Planning Commission, 1939; also Part I of this report.

<sup>2</sup> *Forest Resources of the Pacific Northwest*, Pacific Northwest Regional Planning Commission, National Resources Committee, 1938; also discussion hereinafter.

<sup>3</sup> See part II of this report.

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# PART IV

## A PLAN AND PROGRAM FOR REGIONAL DEVELOPMENT AND IMPROVEMENTS

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### Acknowledgment

This report is a brief composite of the development policies and programs formulated by the people of the region and the various agencies that serve them. No one group—least of all the Regional Planning Commission (which has reviewed and sponsored the report) or the staff (which has drafted it)—would presume to claim this framework of a plan and program as its own creation. The broad view intended to be presented could result only from a continuing contribution—on the part of the many Federal and State agencies and public-minded bodies and individuals concerned—to the knowledge of the region's resources and to clarification of its aims. Grateful acknowledgment is made of long-term cooperation with the Regional Planning Commission of associated committees and advisors, as well as of immediate assistance of agencies and individuals in furnishing criticism and advice, information as to plans and projects, and other data. It is regretted that the great amount and wide range of assistance received precludes specific mention here of those to whom sincere thanks are due.

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<sup>1</sup> Until July 1941.

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## PART IV FOREWORD

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Part IV of this report presents a general plan and program for the development of the Pacific Northwest. The framework of a regional development plan included herein is the second such presentation,<sup>1</sup> but the program outlined is the first presentation of an over-all view of development programs and of a reservoir of internal improvement projects for the region. Since machinery and procedures have not been available for the complete assembly of public works and improvements contemplated at all levels of government, the current survey has been largely of a reconnaissance character. Many important programs have been indicated only in very general terms, and unquestionably, many desirable projects have been omitted. It is still more difficult, particularly in a pioneer report, to present anything like a comprehensive view of the nongovernmental programs that are so essential to regional development.

The basic object of this presentation is to encourage the people of the region to take stock of what resources are available, and realistically to determine how these resources can best be used in promoting the welfare and security of the people who are dependent upon them. More specifically, it is intended to present a basis for the consideration of the problem of general development and stabilization of employment in the region; to present a plan and program of works and activities looking toward the expansion of economic opportunity in the region, toward meeting the immediate needs of the present war period, and finally, toward the provision of a needed reservoir of work and improvements for the post-emergency era of readjustment and reconstruction.

The National Resources Planning Board has presented to the President and the Congress a series of reports on the development of resources and the stabilization of employment in the United States.<sup>2</sup> The Board's study covers a program for national development, including the programs of Federal agencies, development plans for each major region in the country, and functional plans and policies for the development of land, water, and energy resources. The Board has presented its reports on these studies with due recognition of several fundamentals: that "our economic system is one of joint private and public activity"; that "the provision

of certain basic facilities is an appropriate public function"; and that as a Nation we are confronted with the problem of planning for the "conservation and better utilization of our resources, for needed public facilities, and also for the productive employment of our resources in human skills and energies."

In addition, the Board has recognized that total national defense includes the "development of a strong, vigorous, and healthy national economy," and, in a broader sense, "the preparation for post-emergency adjustments." As part of the solution to the problem of adjustment, the Board suggested a national reservoir of public construction projects,<sup>3</sup> and, to make that pool quickly available in time of need, provision for carrying forward, in advance, the surveys, investigations, and plans for selected projects.

This Pacific Northwest plan and program is intended as a regional counterpart to the series of national reports described above. It should not be considered as the plan and program of the Regional Planning Commission. This advisory planning agency has not presumed to take the role of master architect for the development of the region. It has attempted to report relevant facts and to draw together and to harmonize the various plans developed or under development by the people of the region and by the technical agencies that serve them.

The framework of a plan and program—rather than a plan and program—is presented. The complete regional plan and program is a concept as yet far from attainable. Such a plan would have to be a synthesis of a great many individual plans and programs—of Federal departments, of States and their subdivisions, and of civic, corporate, and private interests. Many of these plans and programs are nonexistent, and all could not be secured and combined in a single, widely understandable scheme. Effort has been made to include the broader essentials of the larger plans and to weave them into a relatively simple statement of objectives for the region; of major problems; of outstanding needs in policy, programs, and organization; and of known projects and types of projects that will tend to further the broad and progressive development of the region.

In erecting the framework of a regional plan, it has not been necessary to draw heavily on imagination.

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<sup>1</sup> *Framework of a Regional Development Plan*, Pacific Northwest Regional Planning Commission, 1940; *Development of Resources and Stabilization of Employment in the United States*, Part II, National Resources Planning Board, 1941.

<sup>2</sup> *Development of Resources and Stabilization of Employment in the United States*, National Resources Planning Board, 1941.

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<sup>3</sup> The Public Work Reserve has been organized in the Federal Works Agency to assist in meeting the need for such a reservoir; the National Resources Planning Board, as cosponsor, functions in an advisory capacity in the project.

Tangible, strong elements of the plan have been prepared—in the water, land, energy, and human resources fields, and for subregional areas—by such Federal agencies as the Corps of Engineers, Bureau of Reclamation, Bureau of Agricultural Economics, Forest Service, Soil Conservation Service, Farm Security Administration, Grazing Service, Fish and Wildlife Service, Park Service, Oregon and California Revested Lands Administration, and Bonneville Power Administration, and by various State and local planning and technical agencies. Supporting data for these elements of a plan have been provided through the investigations and research of a considerable number of governmental, industrial, and civic groups.

For various reasons, it is desirable again to present the substance of the plan framework: The plan is not static; it should be critically and constructively reviewed and revised from time to time. Benefit has already been had of a number of suggestions received as a result of its first publication. Finally, it is not desirable to consider a program of works apart from the basic objectives and plans; without concurrent consideration of the larger economic and social causes and effects, lists of programs and projects lack reality and coherence.

In assembling the first regional works program outlined herein, advantage has been taken of previous studies. Project lists have been drawn most largely from the reports of the Pacific Northwest drainage basin committee,<sup>4</sup> the 6-year public works programs of Federal agencies, the 6-year capital improvement programs recently developed by the States of the region,<sup>5</sup> and reconnaissance studies of the types of public improvements planned or needed in representative municipalities and metropolitan and rural areas. Yet it must be reiterated that this works program or reservoir is far from complete. It must be expanded, built up, improved—particularly by the addition of improvements designed to meet existing and emerging community, industrial, and service needs.

The formation and use of a reservoir of needed and desirable improvements for the post-emergency period, and for a long-range construction program generally, must be approached with a high degree of vision and realism combined. It is known that, on the slackening of the unprecedented war effort, construction resources—essential plant, machines, science, technology,

and labor—will be available in large quantities. We know also that radical and large scale reconstruction is overdue for many kinds of public and quasi-public improvements, affecting highways, parking, transport and terminals, blighted areas, housing, parks, sanitation, and power, and that this reconstruction should be planned on an integrated community and regional basis. Ways and means must be imaginatively, realistically, and directly sought to bring these two fundamental factors together. It is unthinkable that these very real instruments for the production of wealth and better living should be allowed to fall again into disuse or that the enormous economic and social wastes inherent in our lagging community development should be allowed to continue indefinitely.

The use of foresight, imagination, analysis, plan, and design is especially important in critical periods such as that of today. It may be granted that the turn of future events cannot be surely and clearly forecast. Yet there are considerable areas in which well-laid plans will be applicable regardless of fortuitous turns. Variations in applicability of good plans are much more likely to be matters of degree rather than kind. Moreover, if flexible plans are available, eventualities may be met or alternative paths taken with greater promptness and assurance.

The cyclical events of the past three decades, including many foreseeable changes and many disasters to the unready, have clearly demonstrated the need of maximum foresight and preparedness—preparedness for possible war in time of peace, for the benefits of peace in time of war, for potential depression in time of high economic activity, for recovery in time of depression. Certainly in the present period of rapidly rising emergency activity it is necessary for leaders—of government in its executive and administrative branches, of industry, labor, and finance, and of professional and civic groups—to look not only at the immediate effort that must be expended but beyond to the inevitable redirection of effort in the use of our expanded resources. Even while meeting the inexorable demands of the present, the future of Nation and of region must be constantly in view.

Thus, this first skeleton plan and program for the future of the Pacific Northwest is offered. Since regional development and stabilization are of such broad concern, it is the hope of the Regional Planning Commission that such a statement will contribute toward understanding of regional aims and toward regional advancement, and also that agencies and individuals in the region will contribute to the development of a plan and program that will become increasingly complete, workable, and effective in both its public and private aspects.

<sup>4</sup> National Resources Committee: *Drainage Basin Problems and Programs: Report of Drainage Basin Committee, Pacific Northwest Drainages.*

<sup>5</sup> Idaho State Planning Board: *Programming Procedure, Including Analysis, 1940.* Budget Division, State of Oregon: *Six Year Construction Program For Buildings, Hospitals Institutions, 1940.* Montana State Planning Board: *Six Year State Construction Program and a Program of Public Works For All State Institutions, 1941.* Programming Study, State of Washington, in progress.