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NORTH COASTAL AREA INVESTIGATION

SOUTH FORK EEL RIVER STUDY

A Summary of the Public Hearing Comments on the Preliminary Edition Dated January 1968

Final Supplement

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BULLETIN No. 173

NORTH COASTAL AREA INVESTIGATION

SOUTH FORK EEL RIVER STUDY

A Summary of the Public Hearing Comments on the Preliminary Edition Dated January 1968

Final Supplement

Copies of this report may be
obtained without charge from:
Department of Water Resources
P.O. Box 388
Sacramento, Calif. 95802

DECEMBER 1969

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Secretary for Resources
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WILLIAM R. GIANELLI
Director
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FOREWORD

This supplement and the preliminary edition of Bulletin No. 173, "South Fork Eel River Study", January 1968, serve as the complete edition of Bulletin No. 173. This supplement presents (1) a summary of the investigation leading to the preliminary edition, (2) a summary of the public hearing comments received on the bulletin, (3) a statement by the California Water Commission, and (4) the findings and recommendations of the Department of Water Resources concerning the investigation and the public hearing.

Bulletin No. 173 presents the results of a 2-year reconnaissance study of surface water development opportunities in the drainage basin of the South Fork Eel River in Southern Humboldt and Northern Mendocino Counties.

Public hearing comments on the bulletin concerned the two most promising projects presented in this study, Cahto on Tenmile Creek near Laytonville and Panther on the East Branch of the South Fork near Garberville, and the beneficial effect such developments could have on the local economy.

The public hearing on this investigation was held in Redway on May 9, 1968. Transcripts of this hearing are on file with the California Water Commission in Sacramento and the Northern District of the Department of Water Resources in Red Bluff and are available for review by the public.

William R. Gianelli

William R. Gianelli, Director
Department of Water Resources
The Resources Agency
State of California
December 1969

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

RONALD REAGAN, Governor
NORMAN B. LIVERMORE, JR., Secretary for Resources, The Resources Agency
WILLIAM R. GIANELLI, Director, Department of Water Resources
JOHN R. TEERINK, Deputy Director

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This report was prepared under the
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****

State of California
Department of Water Resources
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ABSTRACT

A public hearing on the South Fork Eel River Study was held jointly by the California Water Commission and the Department of Water Resources on May 9, 1968, at Redway. The results of the study, a 2-year reconnaissance investigation of the South Fork Eel River Basin, were presented in the preliminary edition of Bulletin No. 173 in January 1968. The objective of the study was to analyze possible water development projects in the basin which might be constructed for local water supply, flood control, recreation, and fisheries enhancement.

This final supplement summarizes the comments received at the public hearing and serves as the final edition of Bulletin No. 173.

The comments made at the hearing were directed toward the two developments in the basin that were found to be economically justified: Cahto Reservoir Project on Tenmile Creek and Panther Reservoir Project on the East Branch of the South Fork. The majority of the people making comments saw the proposed projects as facilities that would help lure more recreationists into an area that has a sagging economy. Some opposition was voiced by landowners in the reservoir areas and by fishermen who were concerned about the effects of the projects on fishlife.

Following the public hearing, the California Water Commission recommended that no further state funds be spent in planning for these projects inasmuch as the necessary recreation and fisheries enhancement funds are unavailable at present. The Department of Water Resources concurred.

INTRODUCTION

The California Water Commission and the Department of Water Resources jointly held a public hearing on the preliminary edition of Bulletin No. 173 in Redway on May 9, 1968.

Gordon W. Dukleth, District Engineer of the Northern District, was the hearing officer for the joint hearing, which was held in accordance with the Water Resources Act of 1945 set forth in the California Water Code under Sections 12616 to 12622 inclusive and Section 12626. Representing the California Water Commission were Clair A. Hill, Member, and Herbert W. Greydanus, Engineer.

SUMMARY OF INVESTIGATION

This section presents the conclusions and recommendations published in the preliminary edition of Bulletin No. 173.

The South Fork Eel River Basin is rich in natural resources, including water, timber, fish and wildlife, and magnificent redwood forests. The orderly and timely development of these resources is essential to the future economic growth of the basin.

The water resources of the basin are almost completely undeveloped. Runoff from the basin, about 1.5 million acre-feet per year, occurs principally in the winter. Streamflows in the summer and early fall, when water requirements are highest, are barely adequate to meet the existing needs. The basin needs water development projects to conserve the winter runoff, to provide flood control, to provide additional water in the summer for urban and irrigation use, and to enhance recreation and fishery potential.

The South Fork Basin is susceptible to damage by flooding and will probably remain so for some time. The flood control potential of developments on the tributary streams is very limited due to the small percentage of the total surface runoff that could be controlled. Major flood control works on the main stem of the South Fork Eel River are impractical due to excessive costs and the potential adverse effect on anadromous fish. The most practical measure to prevent flood damage would be a comprehensive program of floodplain management. Some lands within the floodplain would be ideally suited for recreational use.

Low-level temporary dam structures have been used at various locations in the basin for many years. These structures appear to have an excellent potential for recreational development. The Department of Parks and Recreation believes that such structures should occupy an

important position in future planning in the basin. Studies of low-level dams would logically be initiated by any local community directly affected by a proposed project.

There will be a large increase in water requirements in the study area in the future; the combined requirement of the South Fork Basin and the Lower Eel subunit will increase from the present level of 30,000 acre-feet per year to an estimated 71,000 acre-feet by the year 2020 and to about 94,000 acre-feet by the year 2070. The population of the basin will increase from 10,500 (1960) to about 59,000 by the year 2070.

Project Analyses

Of the 24 potential damsites surveyed, only three were selected for detailed economic analysis. The remaining sites were dropped from the study for various reasons, primarily unsound geologic conditions and lack of potential for recreation development. As a result of the economic analysis of these three projects, the following conclusions were reached:

1. The Cahto Project on Tenmile Creek, with a reservoir storage of 95,500 acre-feet, could provide 20,000 acre-feet of flood control storage; a firm yield of 18,000 acre-feet per year for urban, recreation, and agricultural use; an increase of about 3,200 king and silver salmon in the commercial catch and 1,100 salmon and steelhead in the sport catch; and would ultimately provide for about 3,750,000 visitor-days per year of water-associated recreation use. The project is economically justified, with a ratio of benefits to costs of 2.11 to 1.00. Construction of this project in coordination with the planned improvement of Highway 101, currently scheduled for about 1975, could result in substantial economies.

2. The Panther Project on the East Branch of the South Fork Eel River, with a reservoir storage of 80,200 acre-feet, would provide a firm annual yield of 63,000 acre-feet for industrial, urban, recreation, and irrigation use; an increase of about 5,000 king and silver salmon in the commercial catch, and 1,800 salmon and steelhead and 17,500 trout in the sport fishery; and environment for up to 56,000 visitor-days per year of water-associated recreation. The project is economically justified and has a benefit-cost ratio of 1.14 to 1.00.

3. The Standley Project on the upper South Fork Eel River, with a reservoir storage of 16,500 acre-feet, would provide a firm yield of 2,500 acre-feet per year for urban and recreation use; an increase of about 1,300 silver salmon in the commercial catch, and 550 salmon and steelhead and 9,000 trout in the sport fishery; and environment for up to 60,000 visitor-days per year of water-associated recreation. The project is not economically justified under present conditions, since the ratio of benefits to cost is 0.76 to 1.00.

Basin Development

Initial development of the water resources of the South Fork Eel River Basin could best be accomplished by the construction of the Cahto Project on Tenmile Creek. This project could meet the growing water needs of the basin and the Lower Eel subunit until about 1990 and would provide an outstanding recreation attraction in the Laytonville area. Construction of the Cahto Project could defer the need for the Panther Project until 1990 or until the water needs of the area increase substantially.

The Cahto Project would provide an excellent opportunity for joint participation by state, federal, and local agencies in the coordinated development of the basin's water resources. It is also compatible with state and federal plans for coordinated development of the entire Eel River Basin.

It was recommended in the preliminary edition of Bulletin No. 173 that:

1. This bulletin be used as a guide in the development of the water resources of the South Fork Eel River Basin, and the plans presented herein be reviewed periodically to reflect changing needs within the area.

2. The Cahto Project on Tenmile Creek be given primary consideration as the initial development within the South Fork Basin.

3. Interested agencies explore possible methods of authorizing and financing the Cahto and Panther Projects and then take action to initiate a feasibility-level study of one or both of these projects.

4. Efforts be made to coordinate the construction of the Cahto Project with the planned improvement of Highway 101 in the project area.

5. Humboldt and Mendocino Counties initiate zoning ordinances or other legal measures to preserve the sites of the Cahto and Panther Projects for future use.

6. The Cahto and Panther Projects be adopted as part of a coordinated plan of development for the Eel River Basin by the California State-Federal Interagency Group.

7. Humboldt and Mendocino Counties adopt a comprehensive program of floodplain management or zoning as the best method of preventing major damage by floods in the South Fork Eel River Basin. The counties should explore the possibilities of land exchanges with state or federal agencies to relocate communities from the floodplain.

8. Interested communities on the South Fork Eel River explore the potential development of temporary low-level dams for recreational purposes.

SUMMARY OF PUBLIC HEARING TESTIMONY

Most of the 23 statements made at the hearing supported the proposed projects, Cahto and Panther, although several had reservations about some aspects of the developments. A number of individuals and organizations stressed the beneficial effect that these projects would have on the local recreation industry. Three witnesses were opposed to the projects. Two of these three were landowners whose lands would be taken by the reservoirs and one was concerned with the effect that low-level dams would have on fish production.

The major points made by each participant at the hearing are briefly summarized below.

California State-Federal Interagency Group -- Endorses the plan of development of the South Fork Eel River Basin as recommended in Bulletin No. 173. The Cahto and Panther Projects have been adopted as elements of the comprehensive plan of development for the Eel-Mad River Basins by the Interagency Group.

Lt. Col. Frank C. Boerger, U. S. Army Corps of Engineers -- Stated that the Corps' position was reflected in the interagency statement but mentioned that there are ways and means by which these projects can be implemented, based on federal laws and cooperation among the federal, state, and local entities. Initiation of projects of this type usually must spring from the local level.

California State Department of Fish and Game -- Explained that it participated in the investigation and concurred that floodplain zoning and management are probably the best approaches to flood control in the basin, especially in relation to the fish and wildlife resources.

The Department of Fish and Game recommended that any future studies give consideration to the possible adverse effects of obtaining borrow materials from stream channels, and the effects that inclusion of other project purposes such as flood control would have upon the benefits assigned to fishery enhancement.

California State Department of Parks and Recreation -- Reiterated its previously expressed conclusions that properly located and operated reservoirs could provide increased opportunity for a variety of water-associated recreational pursuits in the South Fork Eel River Basin. The planning criteria used to develop recreation use, cost, and benefit estimates were based on stable recreation pools at specific surface elevations. These evaluations assume optimum development of the available land and water surface areas, and operation for recreation and fishery enhancement purposes.

The Department of Parks and Recreation therefore believes that it would be prudent to qualify the conclusions in Bulletin No. 173 to reflect the possibility of reduced recreation benefits because of benefits ascribed to water supply and flood control.

California State Department of Public Works, Division of Highways -- Believes that the project costs for the highway relocation will be approximately twice the figure shown in Bulletin No. 173.

County of Humboldt -- Supports the projects and will make an all-out effort for immediate and continued recreational development. The Board of Supervisors also intends to request the Corps of Engineers to specifically study the two projects as part of the Dos Rios Dam construction and financing program.

County of Mendocino -- Requests advancing the Cahto Project to feasibility grade with financing incorporated in the total Eel River Basin Water Resource Development Plan and coordinated by the Federal-State Interagency Group.

Mr. Jerald R. Butchert, Executive Secretary, Eel River Association -- Although he was speaking unofficially, Mr. Butchert felt that the Association would support the proposed projects.

Garberville Chamber of Commerce -- Sees recreation as becoming increasingly important to the area. As a result, the Chamber supports Panther Dam but has misgivings about having to flood the property in the reservoir area.

The Miranda Recreation Committee -- Supports projects that are recreation oriented and that will help stimulate business and provide employment.

North Mendocino County Chamber of Commerce -- Voted overwhelmingly in favor of the development of the Cahto Project. They raised a question about the Bulletin No. 173 statement that the water tables in the Laytonville area are high enough to insure that water would not be required from the proposed project for local use for many years. Many of their members disagreed with this statement because wells in the area have gone dry even in normal rainfall years. Their question was:

> "Is drilling deeper wells more practical than pumping lake water?"

A department spokesman explained that since Laytonville Valley is 100 to 150 feet higher in elevation than Cahto Reservoir, it would be fairly expensive to pump irrigation water to the Valley. Preliminary department studies indicate that more than enough ground water is available between 10 and 120 feet in depth. It appears then that ground water

represents a more favorable water supply than Cahto Reservoir. However, a cost comparison of these two sources should be fully explored in a feasibility study of the project.

Redway Community Services District -- Favors early construction of Panther Dam because of the stimulation it would have on the recreation industry in the area.

California Wildlife Federation, Associated Sportsmen of California, Salmon Unlimited -- Although these organizations agree that some fisheries enhancement is possible by the construction of Panther Dam, they doubt that this would be the case at Cahto Dam with the continued obstacle to fish migration at Benbow Dam. They believe that further studies should be conducted by the Departments of Fish and Game, Parks and Recreation, and Water Resources with particular attention to the problem of Benbow. They will continue to press for the removal of Benbow Dam at the earliest possible date in order to save and restore the fishery resource.

Mr. Heath Angelo, Branscomb -- Concerned that dams upstream from his property might cause higher stream levels and access problems for him. He favors a reservoir in the vicinity of Laytonville for recreation purposes.

Mr. John Hargus and Mrs. Adah Blinn, Laytonville -- The Cahto Reservoir and associated recreation areas would take most of the flat hay-producing lands of their joint ranches. Without those flat haylands, their ranches would be uneconomic and they could not continue to pay Mendocino County tax from the returns. They also feel that the cost figures given in Bulletin No. 173 for the land to be taken are unrealistic, that the county can ill afford to have their property taken from the tax rolls, and that reservoirs and recreation lands be confined to rough or canyon territory rather than agricultural lands.

Mr. John R. Heino, Eureka -- Attended meeting to learn something about the financial problems of getting these projects built.

Mr. William H. McClure, Redway -- Very much against seeing any more low-level dams, such as Benbow, go in because they increase the temperature of the water and thereby kill the yearling fish that mean so much to sportsmen and commercial fishermen.

Mr. J. Dwight O'Dell, Eel River Association, Fortuna -- Supports the basin-wide planning efforts of the major water development agencies and pledges to help promote the development of projects on the South Fork Eel.

Mr. Otto C. von Seggern, Consulting Professional Engineer, Santa Rosa -- Favors an Eel River Basin development that would combine both major and minor projects as inseparable features in an areawide comprehensive project. Local projects would be projects like Cahto and Panther; major projects would be the ones needed for flood control and for water needed for the State Water Project.

Miss Marjorie B. Siebert, Willits -- Concerned about access to her property if the Cahto Project is built. Preliminary plans, made during this reconnaissance study, include an access road along the west side of the proposed reservoir. More detailed plans would appear in the next stage of the investigation -- a feasibility study.

Mr. and Mrs. Warren Woodruff, Laytonville -- Oppose Cahto because the reservoir would inundate all their property. They also feel that the project offers very little flood control benefit, that the county would lose property tax receipts, and that recreation projects are not self-supporting.

Mr. Desmond Swithenbank, Garberville -- Feels that local projects would help the slumping business in the area.

Mr. Clair A. Hill, California Water Commission -- Commented on some of the conflicts involved in the construction of a recreation-oriented water project.

Such conflicts and considerations must be brought out and discussed in detail at public meetings like the one being reported upon here. Public understanding and participation are essential to the proper development of any project.

For example, various water temperatures serve various functions. Warm water promotes swimming, cold water promotes fish production. Also, reservoirs by their nature must inundate valley land, land that is also valuable for agriculture.

Concerning recreation, Mr. Hill feels that there is a great deal of misunderstanding concerning the value of the recreation dollar. The State Chamber of Commerce made a study in Mariposa County to arrive at a per-day value of recreation itself. The report on this study would be worthwhile reading for anyone interested in the recreation industry. The recreation industry is changing a great deal as people come with campers and trailers and bring everything with them. Many people that come to recreate in parks don't contribute as much to the local economy as we seem to think they do, and that impact is being felt in many places that rely heavily on the recreation industry.

STATEMENT BY THE CALIFORNIA WATER COMMISSION

On June 7, 1968, the California Water Commission commented on the Bulletin No. 173 public hearing in the following letter.

Honorable William R. Gianelli
Director
Department of Water Resources
1416 Ninth Street, 11th Floor
Sacramento, California 95814

Subject: Bulletin No. 173, "North Coastal Area Investigation, South Fork Eel River Study"

Dear Mr. Gianelli:

The Commission participated with the Department in conducting the hearing on the above report on May 9, 1968. A summary concerning this hearing was prepared and is attached. We believe a few comments are advisable.

First, speaking to the Cahto Project, which is estimated to cost $15.1 million and which the report indicates is an economically justified project, the benefits justifying it would be 15 percent water conservation for irrigation, urban and recreation uses, 3 percent flood control, 74 percent recreation and 8 percent fisheries enhancement. In the matter of fisheries enhancement, the Department of Fish and Game seems to be on the fence as to whether or not the fisheries would be enhanced. This being the case and since there is at present no means of funding for the recreation and fisheries enhancement, it is the opinion of the Commission that no further funds should be spent on this project.

The other project considered was the Panther Project costing $22.6 million. This project was concluded to be economically justified with benefits of 42 percent for water conservation for <u>possible</u> future industrial use, 40 percent for

water conservation for urban, agricultural and recreation uses, 6 percent for recreation and 12 percent for fisheries enhancement. Insofar as the industrial water use is concerned, it would appear that this project is in competition with the Butler Valley Project, which is apparently proceeding toward construction. Again, insofar as the recreation and fisheries benefits are concerned, there are no means of funding these; therefore, it would appear that further funds should not be spent on this project until the overall needs of the Lower Eel and Lower Mad River areas are adequately studied. It also appears appropriate that any subsequent studies of either the Panther or Cahto Projects by federal agencies should be coordinated through the State-Federal Interagency Group.

Sincerely yours,

/S/ Ira J. Chrisman

Ira J. Chrisman
Chairman

FINDINGS AND RECOMMENDATIONS

The Department of Water Resources is pleased to note the general support that was given the results of the investigation. Upon consideration of the statements made on the study, the Department finds that its original recommendations, as presented on page 9 of this supplement, continue to be valid.

However, the Department concurs with the California Water Commission that no further money be spent on these projects until funding for the nonreimbursable recreation and fisheries enhancement portions of the projects is identified. Also, before these projects can be implemented, a market must be established for the water supply which would be developed. This is particularly important in the Panther Project since its economic justification depends on the water supply purpose.

As suggested by the Commission, the Department will coordinate any future studies of these projects through the State-Federal Interagency Group.

Construction of local projects in the South Fork Eel River Basin will depend on local initiative and action. For any project, and for any method of project implementation, local action will be needed to move a project toward construction. Strong local action and local involvement during planning for these projects will go a long way toward minimizing any misunderstandings and disruptions to people and the local economy that might develop as a result of these projects.

WITNESSES

The following individuals and organizations made statements on the bulletin. A number of the statements were presented both orally at the hearing and in written form to the Department of Water Resources. A transcript of this hearing and the original copies of all written comments are on file and available for public review in the Northern District office in Red Bluff.

Oral Statements

Mr. Joseph E. Carson, U. S. Bureau of Reclamation, Napa (Presented statement for the California State-Federal Interagency Group)

Lt. Col. Frank C. Boerger, U. S. Army Corps of Engineers, San Francisco

Mr. Clair A. Hill, Member of the California Water Commission, Redding

Mr. Jack C. Fraser, California State Department of Fish and Game, Sacramento

Mr. Melvin J. Bareilles, Supervisor, County of Humboldt, Rio Dell

Mr. Harvey Sawyers, Supervisor, County of Mendocino, Willits

Mr. Jerald R. Butchert, Eel River Association, Santa Rosa

Mr. J. Dwight O'Dell, Eel River Association, Fortuna

Mr. William D. Brown, Garberville Area Chamber of Commerce, Garberville

Mrs. Laura Pulscher, Miranda Recreation Committee, Miranda

Mr. Paul McKeehan, Santa Clara, representing
California Wildlife Federation
Associated Sportsmen of California
Salmon Unlimited

Mr. John R. Heino, Citizens Clean Air and Water Association, Eureka

Mr. E. J. Lupien, North Mendocino County Chamber of Commerce, Laytonville

Mr. Desmond Swithenbank, Desmond Redwood Motors, Garberville

Mr. Otto C. von Seggern, Santa Rosa

Mrs. Adah M. Blinn, Laytonville

Mr. William H. McClure, Redway

Written Statements

California State-Federal Interagency Group: U. S. Army Corps of Engineers, U. S. Bureau of Reclamation, U. S. Soil Conservation Service, California State Department of Water Resources

California State Department of Fish and Game, Mr. Walter T. Shannon, Director

California State Department of Parks and Recreation, Mr. William Penn Mott, Jr., Director

California State Department of Public Works -- Division of Highways, Mr. J. A. Legarra, State Highway Engineer

County of Humboldt, Mr. Elwyn L. Lindley, Chairman, Board of Supervisors

County of Mendocino, Department of Public Works, Mr. Robert R. Newhouse, Director

Garberville Area Chamber of Commerce, Mr. William D. Brown, President

The Miranda Recreation Committee, Mrs. Laura Pulscher, Member

North Mendocino County Chamber of Commerce, Mr. E. J. Lupien, Secretary-Treasurer

Redway Community Services District, Mr. J. M. Primrose, President

California Wildlife Federation
Associated Sportsmen of California
Salmon Unlimited, Mr. Paul McKeehan, Santa Clara

Mr. Heath Angelo, Branscomb

Mr. John R. Hargus and Mrs. Adah M. Blinn, Laytonville

Mr. Otto C. von Seggern, Santa Rosa

Miss Marjorie B. Siebert, Willits

Mr. and Mrs. Warren S. Woodruff, Laytonville

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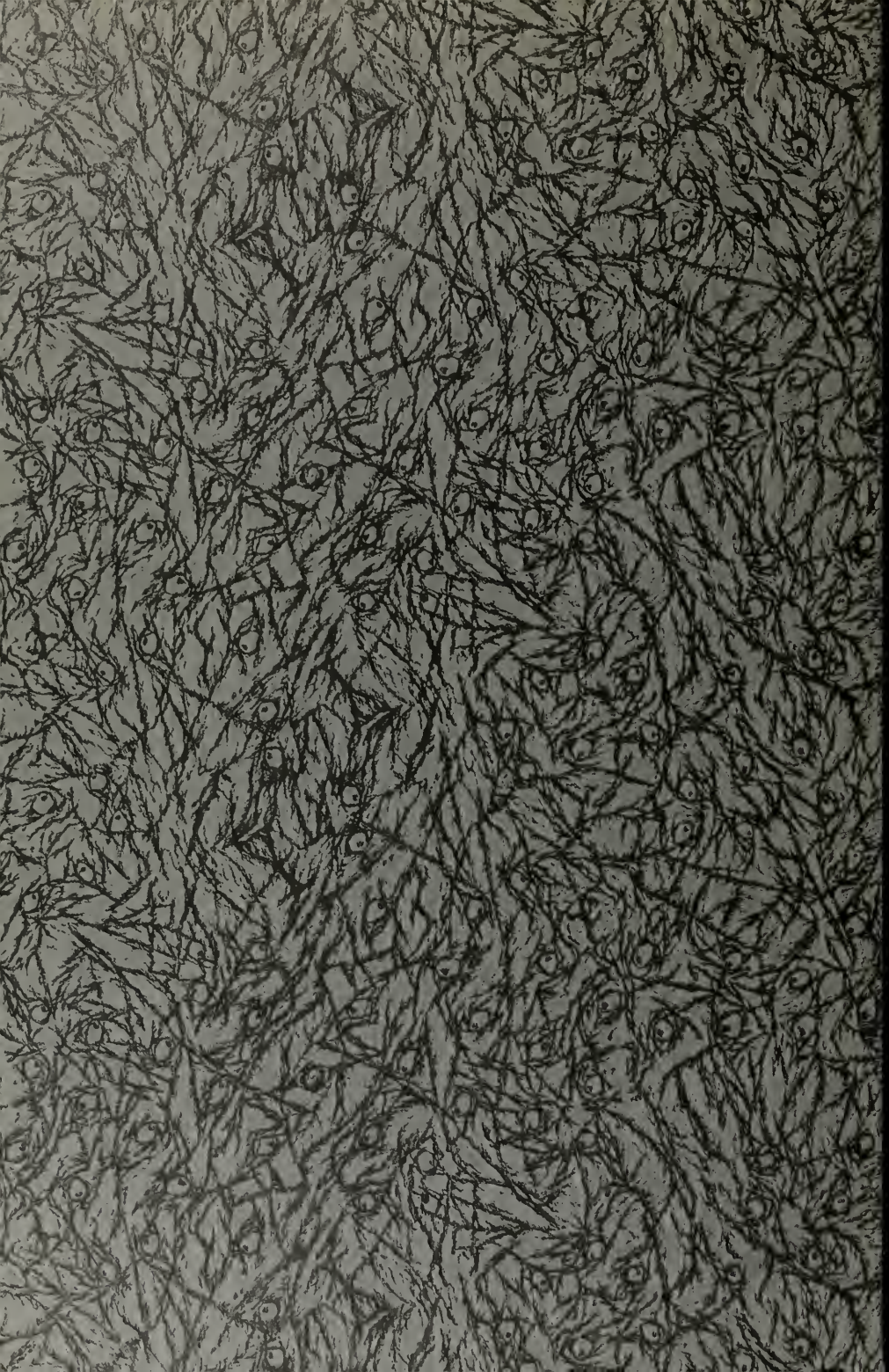
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