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A SPECIAL REPORT ON THE DEPARTMENT OF FISH AND GAME SUSITNA RIVER HYDROELECTRIC PROJECT

For the Fiscal Years Ended
June 30, 1982, 1981 and 1980

Audit Control Number

11-4136-83-S

Commissioner, Department of Fish and Game	Don Collinsworth
Deputy Commissioners, Department of Fish and Game:	
Resource Management	Vacant
Program Management	Vacant

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PURPOSE OF THE REPORT

In accordance with a Legislative Budget and Audit Committee request and Title 24 of the Alaska Statutes, this special report has been prepared on the Department of Fish and Game's performance in the Susitna River Hydroelectric Project to determine:

1. The current status of the Department of Fish and Game's research for the Susitna River Hydroelectric Project.

2. If the Department is accomplishing the Project's goals and objectives previously established.

3. The Alaska Power Authority's impression of the Department's performance in the Project.

4. If the Project expenditures incurred by the Department are appropriate and reasonable.

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BACKGROUND INFORMATION

PURPOSE

The purpose of the Susitna River Hydroelectric Project is to develop a plan to generate and transmit electrical power which will:

1. Minimize the cost of electrical power in the market areas.

2. Minimize adverse environmental and social impacts while enhancing environmental values.

3. Safeguard life and property.

The current plans propose construction of two dams on the upper Susitna River at Devil Canyon and Watana.

The Alaska Power Authority (APA) in the Department of Commerce and Economic Development (DCED) are responsible for planning and supervising the Susitna River Hydroelectric Project.

PLAN OF STUDY - Department of Fish and Game (DFG)

In November 1979, DFG presented to APA a Plan of Study for researching the environmental impacts of the Susitna River Hydroelectric Project. DFG listed two research studies in the Plan of Study.

1. The Aquatic Research Study would collect and analyze data about the fishery and aquatic habitat resources in the Susitna River. DFG proposed a $4 million budget to complete the first two years of the Aquatic Research Study.

2. The Terrestrial Research Study would collect and analyze data about the big game populations in the Susitna River Basin. DFG proposed a $1.3 million budget to complete the first two years of study.

DFG proposed that both research studies would be completed in two phases and take five years. The objective of Phase I is to collect enough biological information to support a license application to the Federal Energy Regulatory Commission (FERC). The information would also be used by another contractor to develop mitigation measures for offsetting potentially harmful environmental impacts of the Susitna River Hydroelectric Project. The mitigation measures will also be used in the FERC license. Phase I will collect two years of research data.

Phase II research studies will continue the field investigations initiated during Phase I. Biological data from Phase II would be used as supplementary information to help process the FERC application. Phase II is to be conducted for three years after Phase I is completed.

Also, in the Plan of Study, DFG warned that the Aquatic Research Study could be delayed because of the lengthy time it took to obtain equipment and qualified personnel through the State personnel and purchase systems. In order to avoid the delay, DFG suggested that the equipment should be ordered well in advance of the field work. DFG also suggested that they could obtain their personnel in a timely manner if APA quickly released the funds for the Aquatic Research Study.

CONTRACT AND PLAN OF STUDY - Acres American, Inc.

On December 19, 1979, APA contracted with Acres American, Inc. to provide engineering and technical services and coordinate the environmental and other studies involved in the Susitna Project. All the studies would be used in the FERC application if the Legislature concurs that the Susitna River Hydroelectric Project should be constructed. Another responsibility for Acres American, Inc. was to purchase equipment for APA to be used by DFG in the Aquatic Research Study. The reason for this responsibility was to develop an efficient system to purchase needed equipment in a timely manner. After the Acres American, Inc. contract was signed, APA had Acres American, Inc. begin ordering equipment for DFG to use in the Aquatic Research Study.

Acres American, Inc. presented a Plan of Study to APA in February 1980, which was released to the public. The February 1980 Plan of Study proposed that the FERC application would be submitted by June 30, 1982 and would include two years of biological data collected by DFG's Aquatic and Terrestrial Research Studies. The Plan also proposed budgets totalling $1.4 million and $1.3 million for the Aquatic and Terrestrial Research Studies. APA accepted Acre American, Inc.'s Plan of Study.

REIMBURSABLE SERVICE AGREEMENTS (RSA) - DFG

In February 1980, APA and DFG signed a RSA (interagency contract) to begin the Terrestrial Research Study. The RSA established that Phase I of the Terrestrial Research Study was to be completed in two years with a budget of $1.3 million. Phase II is to be budgeted and negotiated at a later date.

The RSA to begin the Aquatic research Studies took several months to negotiate. Because of differences in approaches

to the Study, APA and DFG did not sign the RSA's for the Aquatic Research Studies until June 1980 (see Recommendation No. 1). The RSA's however, stated that most of the research for Phase I of the Study would be done in the summer of 1981 and would be finished by June, 1982. The RSA's established a budget of $1.7 million for the Division of Commercial Fish and Division of Sport Fish to complete Phase I of the Aquatic Research Study.

ACQUISITION OF PERSONNEL - DFG

After the RSA for the Aquatic Study was signed in June, 1980, DFG placed the requests to obtain new positions. As DFG predicted in their Plan of Study, (see PLAN OF STUDY - DFG, page 3), they were not able to get their requests for new positions processed and approved until October 1980. This was too late for DFG to begin their research for the summer of 1980 (see Recommendation No. 1).

PRELIMINARY FEASIBILITY REPORTS - APA

In March 1981, APA presented a report to the Governor and Legislature recommending that work should continue on the Susitna River Hydroelectric Project. The report however, did note that little environmental information had been collected on the aquatic habitat of the Susitna River Hydroelectric Project due to a late start in DFG field investigations.

In April 1982, APA presented a second feasibility report to the Governor and Legislature. This report also recommended that work on the Susitna River Hydroelectric Project should continue. The report contained information included in Phase I reports submitted by the Aquatic Research Study and the Terrestrial Research Study. The Terrestrial Research Study Phase I reports had 1980 and 1981 research data. The Aquatic Research Study reports contained only information collected during the period from October, 1980 through October, 1981.

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CURRENT STATUS OF THE PROJECT

POSTPONEMENT OF FERC LICENSE SUBMISSION

Because the Aquatic Research Study contained only one year of research data by June 1982 and not two years, APA has extended Phase I work to include the summer research work of 1982. APA has also postponed the date for submitting the FERC license application from July 1982 to February 1983. One of the reasons for the postponement is to obtain more data from the Aquatic Research Study (see Recommendation No. 1). APA believes that the application will be more acceptable to FERC if it contains two years of collected data concerning the aquatic environment.

APA'S EVALUATION OF ENVIRONMENTAL STUDIES

APA has told us that the data collected by DFG and reported in the Phase I studies is comprehensive and useful in evaluating the environmental impacts of the Susitna River Hydroelectric Project. APA has expressed concern, however, as to whether the Aquatic Research Study will have the summer of 1982 data analyzed and summarized in a report by the proposed FERC application date (see Recommendation No. 1). DFG has told us that they plan to have the studies completed and the report written by February, 1983 and are currently on schedule. They believe that if their report is delayed, that it will not affect the submission of the FERC license. They believe that they can submit their report after the FERC license application has already been submitted.

DFG'S EXPENSES FOR THE RESEARCH STUDIES

As of June 30, 1982, the Division of Game has spent $1,703,778 on the Terrestrial Research Study and the Division of Sport Fish and Division of Commercial Fisheries have collectively spent $2,381,345 on the Aquatic Research Study. (see Statement of Authorization and Expenditures on page). Also $742,200 of equipment has been purchased for the Aquatic Studies by APA and Acres American, Inc. Other services, including lease space for offices and storing equipment, have been provided by APA and Acres American, Inc. These services have totalled $164,000 (see Notes to the Financial-Statements, Note 3 on page 15). We found these expenditures to be appropriate and reasonable.

OTHER INFORMATION

The contract for Acres American Inc. has totalled to over $40 million and is to be terminated in March 1983. A joint

venture, Harza-Ebasco, has been hired to replace Acres American Inc. for Phase II of the Susitna River Hydroelectric Project. APA and DFG expect to conduct research on the Terrestrial and Aquatic research Studies for Phase II of the Project another two or three years after the FERC license application has been submitted.

FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

In order to better plan and coordinate the activities in the Aquatic Research Study of the Susitna River Hydroelectric Project, the APA and the DFG should:

1. Accurately identify in advance the objectives and scope for each year's program.

2. Identify the administrative realities which can delay the Aquatic Research Study's progress and aggressively work to resolve them.

3. Develop plans to ensure that the biological data collected by the Aquatic Research Study during the summer of 1982 is submitted with the FERC license application on February 1983.

The Aquatic Research Study is being conducted by DFG to provide a resource base for evaluating the environmental impacts of the proposed Susitna River dams. In addition, data collected in the Study will supplement information from other studies for the Susitna dam license application sent to the FERC. Delays in the Aquatic Research Study could delay the Susitna River Hydroelectric Project, resulting in higher costs because of inflation.

In our review of the performance of the Aquatic Research Study, we found that the Study's progress is almost a year behind schedule of the Acres American, Inc. 1980, Plan of Study, issued in February, 1980. The delayed progress is one of the reasons why APA decided to postpone the date for submitting the FERC license from July 1982 to February 1983.

At the beginning of the Susitna River Hydroelectric Project, APA should have accurately identified the objectives, scope and time requirements for the Aquatic Research Study. This may have prevented the lengthy negotiations that took place before the first reimbursable service agreements were signed by APA and DFG (see Background Information, REIMBURSABLE SERVICE AGREEMENTS, page 4). DFG basically believed that the general approach of the Aquatic Research Study should be to assume there would be substantial impacts by the Susitna River Hydroelectric Project up and down the Susitna River. The Aquatic Research Study should then begin researching the biology of all potential impact areas in depth. On the other hand, APA believed that the Aquatic Research Study should first identify potential physical changes caused by the Project, determine which impacts were important for the acceptance of the project and only then intensify the study of the biological relationships. Because of these differences in

opinion, it took several months for APA and DFG to agree on the scope of the Aquatic Research Study.

The delay in the Aquatic Research Study also may have been avoided if APA had realized the administrative realities that it takes a department several months to obtain new employees. Then both APA and DFG should have aggressively worked to avoid the delay which postponed DFG's field research to the late fall of 1980. If DFG had begun their field research in the summer of 1980, the Aquatic Research Study may have completed it's second year of research on schedule (See Background Information, REIMBURSABLE SERVICE AGREEMENTS (RSA) - DFG, page 4).

APA and DFG have not had previous experience with projects as large and complex as the Susitna River Hydroelectric Project and the Aquatic Research Study. Because of these facts, detailed planning will provide better guidance for the Aquatic Research Study. APA has already instituted several steps which we believe will help improve the planning and coordination of the Aquatic Research Study. However, there has been concern expressed about whether the data collected by the Aquatic Research Study will be available in a timely manner for the FERC application. We suggest that APA and DFG meet to identify the potential problems which might delay the timely transfer of data and develop plans to solve them.

STATE OF ALASKA

AUDIT DIVISION
POUCH W
JUNEAU, ALASKA 99811

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

November 1, 1982

Members of the
Legislative Budget and Audit Committee:

We have examined the Statement of Authorizations and Expenditures for the State of Alaska, Department of Fish and Game, Susitna River Hydroelectric Project, for the Fiscal Years Ended June 30, 1982, 1981, and 1980. Our examination was made in accordance with generally accepted auditing standards and accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The policy of the State of Alaska is to prepare its financial statements on the basis of accounting described in Note 1. Accordingly, the accompanying financial statement is not intended to present financial position and results of operation in conformity with generally accepted accounting principles.

In our opinion, the Statement of Authorizations and Expenditures presents fairly the authorization, expenditures and closing balances of the State of Alaska, Department of Fish and Game, Susitna River Hydroelectric Project, for the Fiscal Years Ended June 30, 1982, 1981, and, 1980, on a basis of accounting as described in Note 1.

Sincerely,

Gerald L. Wilkerson

Gerald L. Wilkerson, CPA
Legislative Auditor
Division of Legislative Audit

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STATE OF ALASKA
DEPARTMENT OF FISH AND GAME
SUSITNA RIVER HYDROELECTRIC PROJECT
STATEMENT OF AUTHORIZATIONS AND EXPENDITURES
For the Fiscal Years Ended June 30, 1982, 1981, and 1980

Servicing Agency	Fiscal Year 1982-Fiscal Year 1980 Authorizations	Expenditures			Total Expenditures	Balances	
		Fiscal Year 1982	Fiscal Year 1981	Fiscal Year 1980		Continuing Programs	Lapsed
Division of Administration	$ 50,600	$ 33,287	$ 017,313	$ -0-	$ 50,600	$ 0	$ 0
Division of Sport Fish	1,789,600	1,194,516	430,520	3,896	1,628,932	159,564	1,104
Division of Fisheries Rehabilitation, Enhancement, and Development	1,500	-0-	0	1,506	1,506	0	(6)
Division of Game	1,778,589	794,412	648,789	260,577	1,703,778	0	74,811
Division of Commercial Fish	870,500	619,941	132,472	-0-	752,413	118,087	0
Division of Habitat Protection	12,000	-0-	0	8,532	8,532	0	3,468
Total	$4,502,789	$2,642,156	$1,229,094	$274,511	$4,145,761	$277,651	$79,377

The Notes to the Financial Statements are an integral part of this statement.

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STATE OF ALASKA
DEPARTMENT OF FISH AND GAME
SUSITNA RIVER HYDROELECTRIC PROJECT
NOTES TO THE FINANCIAL STATEMENTS
For the Fiscal Years Ended June 30, 1982, 1981, and 1980

Note 1 - Summary of Significant Accounting Policies

The following is a summary of the significant policies of the State of Alaska applicable to the Department of Fish and Game, Susitna River Hydroelectric Project.

A. Source of Funding. The Department of Fish and Game's involvement in the Susitna River Hydroelectric Project is funded through reimbursable service agreements with the Alaska Power Authority, Department of Commerce and Economic Development.

B. Fund Accounting. The State of Alaska maintains its accounting in accordance with the principles of fund accounting. A fund is a fiscal and accounting entity established by law to segregate and account for designated resources and activities. The activities of the funding sources described above are in the General Fund.

C. Basis of Accounting. The financial statement for Department of Fish and Game, Susitna River Hydroelectric Project is reported on the accrual basis of accounting.

Note 2

The Division of Sport Fish, Division of Commercial Fisheries, and the Division of Game have received additional funding from the Alaska Power Authority to continue their research in Fiscal Year 1983. They received from the Alaska Power Authority reimbursable service agreements for $2,771,500, $757,100 and $1,032,000 respectively in July, 1982. This has increased the total funding for the Department of Fish and Game's involvement in the Susitna River Hydroelectric Project to $9,063,389.

Note 3

The Department of Fish and Game has been utilizing equipment, clerical services, and lease space for personnel and equipment provided by the Alaska Power Authority and Acres American, Inc. Up to July, 1982, the amount of equipment purchased for the Department of Fish and Game's use is $742,204. Other services, including leases, have totaled to $164,000. These costs are in addition to those expenditures in the Statement of Authorization and Expenditures and account for $906,200 of additional expenses.

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STATE OF ALASKA
DEPARTMENT OF FISH AND GAME
COMMISSIONER'S OFFICE

Bill Sheffield, Governor

P.O. BOX 3-2000
JUNEAU, ALASKA 99802
Phone: (907) 465-4100

February 7, 1983

Mr. Gerald L. Wilkerson, CPA
Legislative Auditor
Division of Legislative Audit
Pouch W
Juneau, Alaska 99811

Dear Mr. Wilkerson:

The Alaska Department of Fish and Game (DFG) has reviewed the Special Report on the Department of Fish and Game Susitna River Hydroelectric Project for the fiscal years ending June 30, 1982, 1981 and 1980 prepared by the Division of Legislative Audit. Our comments follow.

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PLAN OF STUDY - Department of Fish and Game (DFG)

It is correctly stated that the DFG proposed that the aquatic research studies be conducted through five years in November 1979. However, it should also be added that the concept of phasing written into our November 1979 proposal was based on the approach which had been established by the APA for the engineering feasibility studies prior to our November 1979 Plan of Study (POS) development. It should also be noted that the five-year approach was originally submitted to the APA by the DFG in December 1977.

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CONTRACT AND PLAN OF STUDY - Acres American, Inc.

First paragraph, last line

It should be stated that even with the accelerated purchase warning by DFG in their POS of 1979, critical equipment and personnel needs required by DFG could not be acquired in time to meet 1980 implementation of the Anadromous Adult Project. It was for this reason that DFG in their June 1980 RSA program statement had planned on implementation of that project in 1981.

It should also be noted that studies on wild biological populations can only be accomplished when the species are present. The Acres Plan of Study, February 1980 schedule for the DFG program was out of place with biological reality. For example, six Side Scan Sonar units ordered by Acres did not arrive on

site until late August 1980, well past the time they could have been put to effective use (See Enclosure A, November 18, 1982).

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POSTPONEMENT OF FERC LICENSE SUBMISSION

We fully agree with the APA that the Federal Energy Regulation Commission (FERC) license submission would be more acceptable with two complete years of data to report but more importantly we believe the FERC will want an analysis of that data. After our FY 83 negotiations, APA agreed that DFG should begin analysis of pre-project baseline conditions related to fish and their habitats commencing with the 1982 data. Two other contractors were also assigned to this task, the Arctic Information and Data Center (AEIDC) and Woodward-Clyde. The AEIDC is responsible for the 1974-81 pre-project and 1982 post-project impact assessment and analysis and Woodward-Clyde Consultants, Inc. is responsible for Exhibit E preparation which includes evaluation of mitigation alternatives and their feasibility. The combined analyses will provide an assessment of post-project fisheries and habitat impacts, and provide for the mitigation alternatives necessary for the required submission to FERC.

We are concerned that APA has altered their recognition of the complexity of the various steps and time required by the various Aquatic Study contractors, including DFG, to provide data analysis. The reality is that the analysis of fisheries and habitat data must proceed in a time frame well beyond the FERC license submittal date. This was specifically agreed to by the APA, its prime contractor Acres, AEIDC, and other state and federal agencies monitoring the feasibility process. Please refer to my November 18, 1982, comments to your agency on this topic and the October 19, 1982, letter (Enclosure B) to Kent Wohl of the U.S. Fish and Wildlife Service from my staff.

A copy of our report schedule in the FY 1983 DFG - APA Aquatic Studies RSA is also included for your reference (Enclosure C). As you will note our late January submission to APA and the other Aquatic Study contractors is a draft internal review and a data transmittal document. The analysis of pre-project conditions from DFG will be submitted on June 30, 1983.

We also question your statement that APA had to delay their license application submittal because of insufficient fisheries data. Please note pages two through six of our November 18, 1982, letter to the Division of Legislative Audit where we previously addressed this issue. The DFG in fact has not delayed submittal of the FERC license application. Rather it is the time frame artificially established by the APA that they knew

contradicted the advice of the DFG and other agencies which makes it appear as though the studies were the cause for delay.

APA's EVALUATION OF ENVIRONMENTAL STUDIES

Information must be collected, analyzed, and transmitted in a timely fashion to insure that potential project impacts are adequately identified. When this project is determined economically feasible, we must insure that mitigation of impacts on fish, wildlife and their habitats will be incorporated as a part of the project design, construction, operation, and management as required by federal law. It is our contention that the study issues and licensing schedule problems APA is experiencing would have been minimized today if this Department's advice and attempts at coordination had received adequate consideration.

Enclosure D identifies a source of delay other than the scheduling and study implementation constraints we have experienced, this Department has been extremely sensitive to the fact that any delay, regardless of the project's technical feasibility, could affect its economic feasibility.

We emphasize that DFG's February reports are review and data transfer documents. Their submission to APA by that date will not enable AEIDC to perform an analysis and for Woodward-Clyde Consultants to incorporate the material in the Exhibit E being submitted to FERC in mid-February. FERC has given an accommodation to the APA which will allow supplemental submittals of data and analysis documents to September of 1983. DFG expects to meet the schedule outlined in our RSA with APA through June 30.

FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

The comments on Parts 1 through 3 of this recommendation follow:

1. Accurately identify in advance the objectives and scope for each year's program.

   The objectives of the DFG November 1979 POS are as viable today as when they were originally proposed in 1977. The minimum five-year time frame we recommended in the 1979 POS to accomplish these objectives is still valid. However, it should be pointed out that of the six objectives in the DFG November 1979 POS, only three were funded by APA. The remaining three objectives have had little attention and tasks related to these objectives were not assigned to DFG by APA for further resolution. The first three objectives

on page 13 of the DFG November 1979 POS, (Enclosure E) are the ones the DFG is pursuing.

An example of our recognition of the required scope of study is found in our proposed studies on access and transmission corridors in the FY 83 program related to fisheries. These studies were not funded by APA. Subsequently, in the list of Deficiencies in the Draft Exhibit E Application prepared by the FERC dated November 21, 1982, they identified the lack of information on access and transmission corridors as one of two general deficiencies in the Draft Exhibit E. This aspect of needed studies was also treated in our November 1979 POS.

DFG has identified the aquatic study program objectives including the general and specific scope of studies which should be executed prior to submitting the license application to the FERC. However, neither Acres' February 1980 POS, nor subsequent State budget appropriations for the project have been funded based on DFG's expected program recommendations. Budget levels were established by the APA without our input and our program was negotiated subsequent to the funding appropriation received by APA. This process leads to inadequate funding to conduct needed programs regardless of whether the objectives and scoping proposed by DFG are accurate. This deficiency in operations falls outside the authorities of this Department.

The cycle has been established on reporting procedures and time duration for studies. Until this year the process has been for schedules to be drafted by the APA for completion of work on the assumption that the DFG can accommodate them regardless of the time requirements associated with the biological timing of data collection and analysis. Prior and not after-the-fact consulation on schedules is required. Every effort has been made to expedite early transmittals of provisional data to Woodward-Clyde [refer to August 19, 1982, letter (Enclosure F) and (Enclosure G)].

2. <u>Identify the administrative realities which can delay the Aquatic Research Study's progress and aggressively work to resolve them</u>.

The DFG has continually identified administrative realities and constraints from the inception of the Su-Hydro Project. However, many of the constraints we have identified have at times been ignored. Where APA and DFG have direct control over administrative constraints problems have been resolved to our mutual satisfaction.

The matter of timely creation of positions through the State personnel process is a constraint which can, and does go beyond the direct control of the APA and DFG. Resolution of this problem may require prioritization by the State Administration and Legislature for the APA and DFG to receive favored treatment in position classification and staffing if project objectives are to be met. During the FY 83 field season, DFG/Su-Hydro made short term borrows of several positions available within the Department as well as using college students under the Western Interstate Commission for Higher Education (WICHE) program to initiate field work until Su-Hydro positions were processed. However, several positions in specialist categories could not be accommodated in this manner.

3. Develop plans to ensure that the biological data collected by the Aquatic Research Study during the summer of 1982 is submitted with the FERC license application in February 1983.

As stated previously, the data which is being reported in the late January and February time frame will be, in accordance with the APA-DFG RSA; a draft form product for internal review to be used to initiate an integrated analysis process by the DFG, AEIDC, and Woodward-Clyde Consultants. It should be stressed that having the field data in a form where it is reduced and useable for analysis does not mean it is useful for inclusion in the FERC license submittal. The meaningful information is the analysis which identifies the feasible mitigation alternatives to offset undiversable project impacts. However, the decisions on the ultimate disposition and release of data in any form from the DFG study products is the APA's to make. However, we hope that the constraints on its use is an area where the APA will consult with DFG. Misuse or misinterpretation of our data due to haste in its transmittal could create problems at a later date which can cause further delays.

DFG is also contributing a substantial amount of data on the physical processes and conditions in the Susitna River. The data is required by other study groups evaluating water quality, stream hydrology impacts, and project operational flow scenarios. Therefore, in September we began transferring several early drafts of biological and physical parameters as provisional data summarized in non-report form to other contractors for their use.

The last paragraph of this section states that DFG early in the program suggested that: the "biology of all potential impact areas be researched in depth." This is not the case as our program has always emphasized the need to first

assess baseline physical habitat conditions in areas potentially impacted by the project. A knowledge of these conditions is essential to the understanding of the impacts of the proposed Su-Hydro Project on fish and their habitats. We must understand the relationships between the biological, physical, and chemical components of the environment. To conduct studies of biological and physical factors out of the same temporal sequence would not provide the data to support analysis of project impacts on fish and their habitats. These studies must be concurrent to be meaningful. Our study plans to date have given balance to the study of both the biological and physical components of the Susitna River aquatic environment. Indeed, the view in this paragraph attributed to APA, that the "APA believed that the Aquatic Research Study should first identify potential physical changes caused by the project" is contradictory to what we have observed in program scoping discussions. The Instream Flow and Aquatic Habitat (AH) Project which is charged with the collection of data to formulate such observations has consistently been the project element which APA has shown the most reluctance to fund. In the FY 83 program we had substantial growth in this program element and basically doubled our staff levels as APA came to realize the importance of collecting physical habitat information.

With regard to the statements on page 10, last paragraph, we refer you to our comments on this matter shown on page six of our November 18, 1982, letter to the Division of Legislative Audit.

Thank you for the opportunity to comment on the preliminary audit report. If there are any further questions we will be pleased to respond.

Sincerely,

Don W. Collinsworth
Acting Commissioner

Enclosures

02-82-13.02

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

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November 18, 1982

Mr. Daniel A. Allen, CPA Auditor
Division of Legislative Audit
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Dear Mr. Allen:

The Alaska Department of Fish and Game (ADF&G) appreciates the opportunity to respond to your Interim Letter No. 1 of October 29, 1982, regarding your initial findings and recommendations on the ADF&G Susitna Hydro Aquatic Studies.

Your recommendation No. 1 regarding the Su Hydro Aquatic Studies states:

"The Alaska Power Authority (APA) and the Department of Fish and Game (DFG) should better plan and coordinate the tasks and activities of the Aquatic Research Study conducted for the Susitna Hydroelectric Dam Project."

We agree fully with this recommendation. However, some qualification or expansion of this recommendation is required. The ADF&G deserves greater recognition for our record of effort, concern and support for the coordination process which we have repeatedly expressed over the past eight years on the Su-Hydro project. Correspondence and attempts to coordinate all aspects related to fish and wildlife with the Corps of Engineers (COE) 1974-1978 and the APA are extensive. However, responses to our concerns and advice by both the COE and APA have been less than adequate. Please refer to my comments to the APA Board of Directors, April 16, 1982, enclosed.

This agency has done its best to assist in identifying the biological data needs, programs and schedules in order to comply with existing federal and State laws and regulations. The constraints placed on study scope, implementation and compliance with the Federal Energy Regulatory Commission (FERC) licensing process has not been of the Department's making, but APA's. The APA has often failed to heed the advice which this Department and other agencies have offered. These advices were based on both Federal and State requirements which are designed to insure that fish and wildlife resources are not diminished. We fully recognize how important the timely presentation of the fish and wildlife information is to the Su-Hydro Project assessment.

This information must be collected, analyzed, and transmitted in a timely fashion to insure that potential project impacts are adequately identified. If the project is determined economically feasible, we must insure that mitigation of such impacts on fish, wildlife and their habitats will be incorporated as a part of the project design, construction, operation, and management as required by law. It is, therefore, our contention that the study issues and licensing schedule problems APA is experiencing would have been minimized or insignificant today if this Department's advice and attempts at coordination had received adequate consideration.

As you note in the last paragraph of the first page of your letter, "Delays in the Aquatic Studies can delay the Susitna Project and increase the total project cost because of inflation and higher interest costs." The subject of the source of these delays has been commented upon by ADF&G numerous times; for example, in a December 5, 1978, letter to APA, Executive Director, Eric Yould, we stated: "Although there is an aggressive effort to get the Phase I studies moving along the schedule proposed in the Susitna Hydro POS (Plan of Study), both the private and governmental sectors must recognize that the Susitna Hydro Project will still be subject to the requirements of Federal environmental law, particularly the National Environmental Policy Act and the Fish and Wildlife Coordination Act. Inadequate Phase I studies and failure to meet the standards of these laws and regulations for project feasibility can, and probably will, result in delays from litigation by preservationist and anti-development interests."

While the preceding comment speaks to a source of delay rather than the scheduling and study implementation constraints we have experienced, this Department has been extremely sensitive to the fact that <u>any</u> delay, regardless of the project's technical feasibility, could affect its economic feasibility. The December 5 letter to Mr. Yould is appended in its entirety for your information.

On page two of your letter you state:

"In our review of the performance of the Aquatic Study, we found that

1. The progress of the research study is almost a year behind schedule.

2. DFG's costs have exceeded the original cost estimates by $900,000.

3. Equipment costs are $300,000 over budget."

In the format presented, your statements could be taken out of context as a serious indictment of ADF&G's performance by a person who fails to read the qualifying points in your text which follows these statements. We therefore suggest you expand on the introductory statement to say, "In our review of the performance of the Aquatic Study in terms of the 1980 original proposed project scope," then follow each of three points directly with either a discussion or qualifications narrative concerning that point.

Our comments on point 1 are:

As you stated in the third paragraph, "In February 1980 Acres (Acres American) submitted a plan for conducting Phase I of the Susitna Project." "Acres plan proposed that the Aquatic Studies should begin in January 1980 and collect two years data for Phase I. The plan was accepted by APA and distributed to the public." If you are suggesting here that a year of aquatic studies, based on Acres and APA's February 1980 study plan, has been lost you are correct. According to their schedule, the aquatic studies were to begin in January 1980, one month before Acres came out with their 1980 plan. However, what is missing is the information that the 1980 aquatic studies plan which was actually approved for initiation by ADF&G is based on an RSA agreement with APA with funding to begin on July 1, 1980. Therefore, according to the plan actually agreed upon in June 1980 by ADF&G and APA, our participation was to begin on July 1, 1980 and not January 1980. It is important to note that at the same time that the agreement was signed, personnel classification documents were also submitted for processing according to State regulations. However, as you acknowledged in your letter, these funded ADF&G positions did not complete State processing until October of 1980. Even if these positions had been available sooner, the initial study period would still have been limited to the process of hiring staff and equipping, planning, and organizing the field phase of the program. Only a limited and reconnaissance level field activity could have been initiated during the open water season as discussed in our November 1979 Plan of Study and other supporting correspondence.

With the recognition that we did not have the approved staff positions, APA approached us in July and August of 1980 to ask if we could initiate an accelerated field program with increased funding. Though we advised APA that additional funding for such a program would not expedite the State process of acquiring personnel an RSA in the amount of $218.0 was approved. We calculate that not more than five months of work was lost according to our June 1980 study plan and RSA. I hope it is evident that the Acres February 1980 study plan schedule was unrealistic, and that the ADF&G program and schedule actually agreed upon though dependent on timely staffing was essentially

on schedule. I hope it is recognized that we tried our best to compensate for these delays.

With regard to point 2; I would be interested in knowing the original source of the cost estimate overrun indicated at $900,000? If it is the February 1980 Acres Study Plan it is an inappropriate reference due to the different time frames of execution of Phase I Studies and lack of consideration of the accelerated Phase I elements taken on by the Department from the Phase II request. Instead, our June 6, 1980 Plan of Study and RSA should have been referenced. According to that agreement, budget summary (enclosed), the estimated budget for the Phase I study (July 1, 1980 through December 31, 1981) and Phase II study (January 1, 1982 through December 1982) was $3,145.2. It should be noted that the ADF&G June 1980 budget did not reflect Acres support services to ADF&G which were budgeted separately by Acres and not made available to us. To arrive at an original budget figure, which assumed no program redirection, we must add the Phase I FY 81 and FY 82 columns of the June 1980 budget summary. The figure of $1,717.0 is the correct original budget figure for the July 1, 1980 to December 31, 1981, Phase I period which APA had us budget for in the June 1980 plan. A Phase I figure to coincide with a fiscal year to match APA's extra six months to June 30, 1982, would be $2,431.1, an estimate derived by adding 50% of the Phase II FY 82-83 columns or $714.1 to the $1,717.0.

A review of enclosures A and B (enclosed) of our RSA amendment program/budget review sent to APA on April 3, 1981 gives a comparison with the "original" June 1980 figures for our RSAs based on program redirection to that point. For Phase I (July 1, 1980 to December 31, 1981) ADF&G, after program scoping changes, projected a revised budget of $2,171.6. This change resulted because APA had funded certain program elements and tasks e.g., administration and support, and report preparation tasks after January 1, 1981. However, by adding $536.7 from the Phase II column 4 of our April 3, 1981, budget summary to the $2,171.6 we have the $2,708.3 which was available to ADF&G for the period July 1, 1981 to June 30, 1982, which was the Phase I closeout for APA and included part of our Phase II field work. Remember our Phase I and Phase II work scheduled did not conform to the budget fiscal year on this project.

The increase of $277.2 in budget from the original 1980 work plan ($2,431.1 to $2,708.3) includes some of the necessary field work funding for selected approved elements from the Phase II segment.

On November 9, 1981 we returned to APA with another budget review and the request for Phase II funding from January 1, 1982 to June 30, 1982. The budget summary from that transmittal

shows the program funded at $2,597.1 which includes $42.2 in state salary increases. An additional $58.0 was added on February 16, 1982, which brought our RSA total for the Phase I period to June 30, 1982, to $2,655.1.

Comparing that figure to our original June 1980 estimate of $2,431.1 indicates that we had an increase of $224.0 for the period July 1, 1980 to June 30, 1982, not $900.0 as indicated in your letter.

Point 3 indicates equipment costs are $300,000 over budget. Our records indicate that $722.4 was available for equipment purchase through June 30, 1982. This increase of $307.5 over our original $414.9 estimate in the June 1980 budget is a result of purchase of some Phase II equipment for the FY 83 field season (see correspondence to APA of February 16, 1982 enclosed). Additional costs resulted from increases after loss of or renegotiated equipment contracts, purchase of equipment for replacement of items borrowed from other ADF&G programs to facilitate project startup, for equipment necessary to support scope changes including additional data processing capabilities for the accelerated programs and data analysis required by APA, or purchase of equipment necessary to replace worn and unsafe items. Good equipment is vital to insuring crew safety in remote and hazardous work areas. Such equipment also provides improved/adequate field camp facilities, which contributes to crew field effectiveness and improved collection of data with state-of-the-art techniques.

The text immediately following the third point in your letter merits some discussion as well. Although these statements do much to qualify the three points in your letter, it seems that it would be appropriate to include a discussion as to how APA and Acres arrived at the budget figures they advanced in the February 1980 Acres Plan of study. It is not clear to us whether their estimate of $1,444.6 million budget for the aquatic studies in that document should have been for Phase I to June 30, 1982, as stated in the Acres 1980 plan. In 1980, the APA had the Department prepare budgets for Phase I based on the assumption that Phase I ended on December 30, 1981. This was with the the exception of some program elements or tasks as previously mentioned. Perhaps their 1.4 million figure is due to a schedule oversight on their part.

The last sentence of the 4th paragraph of page 2 refers to the change in the FERC license application date states, "The change was due, in part, to the insufficient information which would have been provided by the Aquatic Studies for the July, 1982 deadline." The Department has stated before in correspondence made available to you during your audit in Anchorage, that a minimum five year time frame will be required to quantitatively

assess Su Hydro Project impacts and provide the basis for an adequate mitigation plan. This Department has not set FERC license application deadlines. The ADF&G has been charged with the responsibility of collecting field information on a biological resource which doesn't recognize these deadlines. We have collected a large quantity of good information but time and continued effort will be needed to quantifiably define important biological and physical relationships which may be impacted by the Su Hydro Project. Please note my enclosed letter of October 20, 1982, to Mr. Jeff Weltzen which touches on these subjects. We also strongly question whether the lack of fisheries information, as opposed to other study elements, was as much of a factor in the APA's decision for delaying the FERC license application date as suggested by APA.

You should also be aware that this year ADF&G has been given a role beyond our 1981-2 assignment of simply summarizing data from our field work. In FY 83 we will carry out an essential task of analysis and assessment of pre-project aquatic habitat and environmental conditions. The offer to assume this vital role is shown in my comments to the APA Board of Directors on April 16 of this year. You should also note my comments to the Board of Directors on the matter of coordination as it is relevant to your recommendation stated earlier.

Your last paragraph states, "APA and DFG have not had much experience with projects as large and complex as the Susitna Project and the Aquatic Studies." For the ADF&G, I can state this is a "yes and no" proposition. No, we have never brought together this many people into a singular field project of this scope or with a budget and biological resource needs identification controlled outside the Department by non-resource personnel for a project of this size and complexity. But, yes, we have an extensive historical background on the issues about Susitna, and other project developments and execution and how to translate these issue concerns into a field program. We have in the past conducted this type of program in the field with a high level of ability and expertise.

We agree detailed planning is necessary, but the constraints of time scheduling for license application and the failure of APA and Acres to recognize the timing of biological data collection and consequent professional reporting has been a problem. This year for FY 83, ADF&G had to wait until late May 1982 for a substantive reaction to our study proposals and budgets which were submitted to APA in early March 1982. The RSAs weren't signed until June, only a matter of two to three weeks before our FY 83 field program was due to start. How conducive to good planning has this process been? Poor at best, but then this agency was not included in the rule making process. I can state

categorically that good planning has been infused throughout this project, as the documents available demonstrate.

In summary, we concur with your closing recommendation to meet with the APA. We hope the APA will make a strong effort to respond positively in this direction.

Thank you for the opportunity to comment.

Sincerely,

for Ronald O. Skoog
Commissioner

Enclosures (5)

cc: Richard Logan
Steve Pennoyer

Enclosure B

Su Hydro Aquatic Studies
2207 Spenard Road

File # 02-82-7.10

October 19, 1982

Mr. Kenton D. Wohl
Acting Assistant Regional Director
U.S. Department of the Interior
Fish and Wildlife Service
1011 East Tudor Road
Anchorage, Alaska 99503

Dear Kent:

Thank you for your 5 October 1982 letter of inquiry pertaining to the 19 August 1982 correspondence from Robert A. Mohn, Alaska Power Authority (APA), to me. Mr. Mohn, as you know, stated that his letter was prompted by an inquiry from Mark Robinson, Federal Energy Regulatory Commission (FERC), to Mr. Mohn asking if fisheries information from 1982 would be included in the APA license application for Su Hydro which is scheduled for submittal to FERC in February 1983.

Your summarization of the 13 May 1982 and 2 June 1982 meetings on the topic of data presentation and analysis schedules is accurate. The attached report schedule from our Reimbursable Services Agreement (RSA) with the APA, indicates that our final reports for 1982 will follow the February 1983 preparation of the Exhibit E and the license application. As noted at the meetings referenced by you, this potential situation was recognized by study participants last spring. It was pointed out then, that the 1982 open water fisheries and habitat data collection season was projected to extend into October 1982. The time to reduce and analyze the large volume of complex data served as the basis for establishing this reporting schedule. Therefore, as you correctly noted in your letter, it was established by Acres American, Inc. (Acres) and the APA that "data gatherers" (ADF&G) and "impact assessors" (AEIDC) would be insulated from the FERC license application preparation schedule.

Accordingly, the ADF&G Su Hydro Aquatic Studies Team will provide the reports indicated in the attached RSA schedule. However, in an attempt to accomodate the APA and FERC, we have further communicated with Mr. Robinson and staff from the APA, Acres, and Woodward-Clyde to determine whether any of our provisional 1982 open water data would be of value if included as part of the February 1982 Exhibit E document being prepared by Woodward-Clyde before its presentation by ADF&G in report form. Essentially, the major interest is for incorporation of 1982 escapement data from our Anadromous Adult project to

Anadromous Adult project to evaluate escapement trends. We, therefore, have agreed to submit this information in a "provisional" format with the understanding that it will be subject to correction when presented in our draft basic data reports. These provisional data will represent first stage reduction of field forms and will be presented in tabular and graphic format. Our intent, at present, is to transfer these provisional data to Woodward-Clyde in November when Woodward-Clyde will be in the process of re-editing their Exhibit E document.

This provisional data transmittal ties into the current scope of FY 1983 data reduction activities by the ADF&G and it does not effect a change in our previously agreed upon reporting schedule. A limitation of these data which will restrict their availability for transfer will be that each transfer must be comprised of a complete package of a specific data set (e.g., complete results of sonar escapement and indexing of adult salmon species through various reaches of the river). This is because partial transfer of data, in our view, could lead to erroneous conclusions by other reviewers and analysts. Therefore, because our open water field season for the Anadromous Adult Project continued into September, complete reduction of data sets will not be available until late October and on into November.

We appreciate the opportunity to clarify our situation on the topics you raised. If you have further questions, please do not hesitate to contact me again.

Sincerely,

Thomas W. Trent
Aquatic Studies Coordinator
Su Hydro Aquatic Studies
Telephone 274-7583

attachment

cc: Commissioner Skoog, ADF&G
Richard Logan, ADF&G
John Hayden, Acres
Richard Fleming, APA
Robert Mohn, APA
Mark Robinson, FERC
Larry Moulton, Woodward-Clyde
Bill Wilson, AEIDC
Al Carson, ADNR

bcc: Project Leaders
L. Heckart
M. Mills
A. Kingsbury

TWT:kw

02-82-710

RECEIVED

1982

Alaska Dept. of Fish & G.
Sport Fish/Susitna Hydr

United States Department of the Interior

IN REPLY REFER TO

FISH AND WILDLIFE SERVICE
1011 E. TUDOR RD.
ANCHORAGE, ALASKA 99503
(907) 276-3800

05 OCT 1982

Thomas Trent
Susitna Hydro Aquatic Studies Coordinator
Alaska Department of Fish and Game
2207 Spenard Road
Anchorage, Alaska 99503

Dear Tom:

Recently we received a copy of a letter dated 19 August 1982 from Robert A. Mohn, the Alaska Power Authority Director of Engineering, addressed to you. We are concerned by the gist of that letter that information transfer has not proceeded as rapidly as intended and that the Alaska Department of Fish and Game (ADF&G) Su Hydro Aquatic Studies Section bears responsibility.

On 13 May 1982 and 2 June 1982, Gary Stackhouse and Leonard Corin, representing the U.S. Fish and Wildlife Service, were in attendance at meetings during which tasks and scheduling of the three aquatic studies groups, ADF&G, the Alaska Environmental Information and Data Center (AEIDC), and Woodward-Clyde were discussed. It was expressed by Acres American, Inc. at the 13 May meeting that:

1. The "data gatherers" (ADF&G) and "impacts assessers" (AEIDC) would be insulated from the time constraints due to license application deadlines so as to allow the identification and quantification of project-related impacts to be completed in a timely fashion; and

2. The ADF&G data base draft reports would be due in January 1983, and then revised by 15 April 1983. A second draft report would be forthcoming in May 1983, and finalized in June 1983. This report would provide an initial biometric analysis and the first assessment of the fisheries-habitat relationship based upon the 1982 field data. This contractual scheduling is illustrated (pp. 157 and 160) in the ADF&G Draft Aquatic Studies Procedures Manual for Phase II of the Susitna Hydro Studies, dated July 1982.

We request that you clarify the present scheduling obligations of your office in regard to product reports. If you believe a meeting would be appropriate to discuss any new information transfer arrangement, please do not hesitate to contact me.

Sincerely,

Acting Assistant Regional Director

cc: Commissioner Skoog, ADF&G, Juneau
John Hayden, Acres American, Anchorage
Richard Fleming, APA, Anchorage
Robert A. Mohn, APA, Anchorage
Mark Robinson, FERC, Washington, D.C.
Larry Moulton, Woodward-Clyde, Anchorage
Bill Wilson, AEIDC, Anchorage

March 1, 1983	ADF&G, FY 84 Draft Plan of Study (POS)
April 1, 1983	APA-ADF&G, FY 84 RSA and POS Agreement. Contingent on approval of funding by the Legislature.
April 15, 1983	ADF&G, Revised Draft Basic Data Report
May 1, 1983	ADF&G, Draft Fisheries and Habitat Relationships Report. An internal working document which functions as a data/information transmittal to AEIDC and other study participants.
June 1, 1983	ADF&G, FY 84 Procedures Manual.
June 30, 1983	ADF&G, Final Draft Fisheries and Habitat Relationship Report. This is a formal document available for broad distribution by the APA to study participants, agencies and the public.
June 30, 1983	ADF&G, Draft Basic Data Report. This would cover winter 82/83 work and include incubation study data. This is an internal working document and data transmittal to study participants.
October 30, 1983	AEIDC Proposed, Draft Impact Assessment Report

F. Procedures Manual

(The Alaska Department of Fish and Game will provide an annual update of the aquatic studies procedure manual by June 1 of each project year.)

Enclosure C

The following discussion outlines the reporting and planning reports and events the ADF&G intend to follow during FY83. Also included are reports based on the proposed reporting schedule of Woodward-Clyde and the Arctic Environmental Information and Data Center (AEIDC). The information presented is to give a perspective of planning and reporting events related to the ADF&G Su Hydro Aquatic Studies. Some preliminary conceptual detail of our reports is also presented based on preliminary discussions with AEIDC regarding our interfacing role in the analysis and interpretation of pre and post project conditions.

The schedule of planning and reporting events is as follows:

July 15, 1982 — ADF&G Draft Procedures Manual FY 83 Field Programs. This is a basic internal ADF&G planning and field guidance document.

July 31, 1982 — Woodward-Clyde (Proposed) Draft Mitigation Outline

November 30, 1982 — AEIDC (Proposed), Internal Working Document, conceptualizing and visualizing project impacts on a non-quantitive basis.

January 31, 1983 — ADF&G, Draft Basic Data Report. This is an internal working document and also provides for data transmittal to AEIDC and Woodward-Clyde and others as appropriate. It basically presents what the data is, how and where it was collected. The report would include winter 81/82 data and data for the ice free season from May thru October 1983. This report does not include habitat versus fisheries relationship information for the winter of 82/83 data or incubation study data collected through the winter of 82/83.

January 31, 1983 — Woodward-Clyde (Proposed), Draft Exhibit E.

STATE OF [illegible]

DEPARTMENT OF FISH AND GAME

OFFICE OF THE COMMISSIONER

SUBPORT BUILDING
JUNEAU, ALASKA 99801

December 5, 1978

Eric P. Yould
Executive Director
Alaska Power Authority
313 West 4th Avenue, Suite 31
Anchorage, Alaska 99501

Dear Mr. Yould:

The Alaska Department of Fish and Game conducted a detailed review of the proposed biological studies in the Susitna Hydro Plan of Study (POS) during April of this year to assist the Corps of Engineers in POS revision. Subsequently, the results of this effort were printed in the June 1978 POS document.

In his June 28 letter transmitting the revised POS to the Alaska Power Authority, Colonel Robertson of the Corps stated, "the activities defined in this document have been developed to adequately address determination of project feasibility." This statement is only partially correct. Although the study objectives are adequate, the funding is totally inadequate to meet those objectives.

On page 40, paragraph 2 of the revised POS, it is stated that "The biological studies outlined in the Plan of Study are of sufficient depth to provide, at the end of Step 2, a strong indication of the probable magnitude of the impacts of the project and to evaluate project feasibility, but may be unable to define the magnitude of mitigation." We agree that the proposed range of the biological studies discussed in these narratives, if performed, should give a strong indication of the feasibility of the Susitna Hydro Project. The budget levels as presently apportioned by the Corps will, however, sorely impair the level of technical and professional sophistication needed to determine feasibility. On April 25, 1978, a letter (attached) by Tom Trent, the Susitna Hydro Studies Coordinator for the Department, forwarded to the Corps of Engineers this Department's basic agreement to the thrust of the biological studies and also included our recommended budget. The budgets proposed by the Department of Fish and

Eric . . .

Game are those we believe necessary to provide the necessary information to provide project feasibility.

Although there is an aggressive effort to get the Phase I studies moving along the schedule proposed in the Susitna Hydro POS, both the private and governmental sectors must recognize that the Susitna Hydro Project will still be subject to the requirements of Federal environmental law, particularly the National Environmental Policy Act and the Fish and Wildlife Coordination Act. Inadequate Phase I studies and failure to meet the standards of these laws and regulations for project feasibility can, and probably will, result in delays from litigation by preservationist and anti-development interests.

The constraints placed on the Corps by the 25 million dollar figure in proposed Federal guarantee legislation for support of the Phase I investigations is unfortunate. It has resulted in reverse budgeting from the top down rather than from the bottom, and consequently, we believe a reduced concern for the adequacy of environmental study programs and their priorities. This Department believes the budgeting situation is poor at best, and every effort should be made by the State of Alaska and our congressional delegation to correct it by reviewing and revising the dollar figure for Federal guarantee legislation to reflect our Department's and other agencies' budget proposals.

Your support and leadership in addressing a solution to our concerns would be greatly appreciated.

Sincerely,

Carl L. Rosier

For Ronald O. Skoog
Commissioner

Attachment

cc: R. Logan
T. Trent

Enclosure E

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

JAY S. HAMMOND, GOVERNOR

333 RASPBERRY ROAD
ANCHORAGE 99502

October 31, 1979

Mr. Eric Yould, Director
Alaska Power Authority
333 W. 4th Avenue
Anchorage, Alaska 99510

Dear Mr. Yould:

The Alaska Department of Fish and Game is providing the enclosed Phase I 25 month portion of the 5-year fisheries and wildlife study proposed to be conducted as part of the Susitna Hydroelectric feasibility investigations. The proposals were developed following discussions with Acres-American and their environmental studies subcontractor, Terrestrial Environmental Specialists. We have also met with representatives of the U.S. Fish and Wildlife Service and the Alaska Department of Natural Resources to obtain their suggestions and advice relative to portions of our proposals and the development of a final revised plan of study. I must indicate, however, that it should not be inferred that USFWS and ADNR have formally endorsed these proposals in their entirety. Their formal positions regarding the entire revised plan of study will undoubtedly come during the next agency and public review stage.

In his letter to me on October 4, Robert Mohn of your staff discussed a number of issues and subject areas which required our input on the development of the revised plan of study. The information provided herein should satisfy part of those requirements outlined by the APA, but specific refinements addressing our concerns outlined in our attached proposal and comments of other agencies will be needed during the period Acres or the Corps of Engineers is revising the POS next month.

Sincerely,

Thomas W. Trent
Regional Supervisor
Habitat Protection Section

cc: Representative R. Halford
Representative B. Rodgers
Commissioner R. O. Skoog - ADF&G
Commissioner E. W. Mueller - ADEC
Commissioner R. E. LeResche - ADNR
J. Lawrence - Acres
J. Barnes - TES
R. Bowker - USFWS

ATTACHMENT E

SUSITNA HYDROELECTRIC PROJECT

Preliminary Final Plan of Study

Fish and Wildlife Studies

proposed by the

Alaska Department of Fish and Game

November 1979

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PROGRAM JUSTIFICATION

The programs proposed by the Alaska Department of Fish and Game (ADF&G) are the first phase of a five year study program, necessary in the opinion of this Department, to meet the provisions of numerous federal and state laws and regulations providing for the consideration of fish and wildlife values in pre-project planning and evaluation of impact assessment, project possibility determination, mitigation of probable impacts should the project be constructed, and surveillance and monitoring during and after project construction. The biological objectives and justification are explained in the task work plans; the statutory and regulatory mandates for conducting these proposed work plans are outlined hereafter:

Federal/State Laws

Fish and Wildlife Coordination Act (FWCA)

The Fish and Wildlife Coordination Act, draft uniform procedures for compliance, May 1979 further standardizes procedures and interagency relationships to insure, "that wildlife conservation is fully considered and weighed equally with other project features in agency decision making processes by integrating such considerations into project planning, National Environmental Policy Act (NEPA) compliance procedures, financial and economic analyses, authorization documents, and project implementation."

As stated in the Federal Register (Vol 44, No. 98) this Act applies not only in the project area, but wherever project impacts may occur.

Subpart B FWCA Compliance Procedures

Sec. 410.21 Equal consideration
Equal consideration of wildlife resource values in project planning and approval is the essence of the FWCA compliance process. It requires action agencies (the Alaska Power Authority, APA) to involve wildlife agencies (the Alaska Department of Fish and Game and U.S. Fish and Wildlife Service, USFWS) throughout their planning, approval, and implementation process for a project and highlights the need to utilize a systematic approach to analyzing and establishing planning objectives for wildlife resource needs and problems and developing and evaluating alternative plans.

Sec. 410.22 Consultation
(a) Initiation. The FWCA compliance process may be initiated by a potential applicant, an action agency, or a wildlife agency.
(b) Potential Applicants. Implementing procedures of action agencies shall provide that applicants for those non-federal project approvals which require a water-dependent power project approval from the Federal Energy Regulatory Commission (FERC) (also applies to preliminary FERC permit) contain written evidence that they initiated the FWCA compliance process with both Regional Directors and the head of the State wildlife agency exercising administration over the fish and wildlife resources of the state(s) wherein the project is to be constructed and early site review (NRC) applicants.

The intent of this paragraph (a)(1) of this section is to assist applicants in designing environmentally sound projects without waste of their planning resources and to minimize the potential for delay in the processing of applications. Action agency implementing procedures shall advise that consultation should be initiated by the applicant at the earliest stages of its project planning, and that its submissions to wildlife agencies shall indicate the general work or activity being considered, its purpose(s), and the general area in which it is contemplated.

National Environmental Policy Act (NEPA)

The Council on Environmental Quality (CEQ), Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR, Parts 1500-1508, July 30, 1979) specifies provisions requiring the integration of the NEPA process process into early planning, the integration of NEPA reqirements with other environmental review and consultation requirements, and the use of the scoping process.

Clean Water Act

Section 404 of the Clean Water Act of 1977 and regulations for implementation of the permit program of the Corps of Engineers (33 CFR, Parts 320-329, July 19, 1977) requires that a Department of the Army permit(s) be obtained for certain structures or work in or affecting waters of the United States. The application(s) for such a permit(s) will be subject to review by wildlife agencies.

Executive Order 11990 (Wetlands)

This order was issued "in order to avoid to the extent possible the long-term and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable altenative," and Executive Order 11988 (Floodplains) was issued "to avoid to the extent possible the long-term and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative." All federal agencies are responsible to comply with these EO's in the planning and decision-making process.

Endangered Species Act

Section 7(c) of the Endangered Species Act, 87 Stat. 884, as amended, requires the APA to ask the Secretary of the Interior, acting through the U.S. Fish and Wildlife Service, whether any listed or proposed endangered or threatened species may be present in the area of the Susitna Hydroelectric Power Project. If the Fish and Wildlife Service advises that such species may be present in the area of the project, the APA is required by Section 7(c) to conduct a Biological Assessment

to identify any listed or proposed endangered or threatened species which are likely to be affected by the construction project. The assessment is to be completed within 180 days, unless a time extension is mutually agreed upon. No contract for physical construction may be entered into and no physical construction may begin until the Biological Assessment is completed. In the event the conclusions drawn from the Biological Assessment are that listed endangered or threatened species are likely to be affected by the construction project, the APA is required by Section 7(a) to initiate the consultation process.

Water Resources Council, Principles and Standards

The principles and standards for Planning Water and Related Land Resources (18 CFR, Part 704, April 1, 1978) were established for planning the use of the water and related land resources of the United States to achieve objectives, determined cooperatively, through the coordinated actions of the Federal, State, and local governments; private enterprise and organizations; and individuals. These principles include providing the basis for planning of federal and federally assisted water and land resources programs and projects and federal licensing activities as listed in the Standards. The President in his June 6, 1978 statement further defined federal water policies.

State Laws

Title 16

Title 16, independently of Federal laws, mandates the Alaska Department of Fish and Game to manage, protect, maintain, enhance, and extend the fish and game, and aquatic plant resources and the habitat that sustains them including assisting the U.S. Fish and Wildlife Service in the enforcement of federal laws and regulations pertaining to fish and wildlife.

Sec. 16.05.870 also states that:

(b) If a person or governmental agency desires to construct a hydraulic project, or use, divert, obstruct, pollute, or change the natural flow or bed of a specified river, lake or stream, or to use wheeled, tracked, or excavating equipment or log-dragging equipment in the bed of a specified river, lake, or stream, the person or governmental agency shall notify the commissioner of this intention before the beginning of the construction or use.

(c) . . . . If the commissioner determines to do so, he shall, in the letter of acknowledgement, require the person or governmental agency to submit to him full plans and specifications of the proposed construction or work, complete plans and specifications for the proper protection of fish and game in connection with the construction or work, or in connection with the use, and the approximate date the construction, work, or use will begin, and shall require the person or governmental agency to obtain written approval from him as to the sufficiency of the plans or specifications before the proposed construction or use is begun.

Purpose. The purpose of this section is to protect and conserve fish and game and other natural resources. 1964. Att'y Gen., No. 10

Alaska Coastal Management Program

The recently approved Alaska Coastal Management Program (ACMP) mandates that all State, Federal and Local government agencies must coordinate all planning and development activities in the State's coastal zone to ensure adequate consideration and protection of Alaska's coastal waters and resources. As the proposed Susitna Hydropower project will occur within Alaska's coastal zone and certainly will directly influence coastal waters all planning and development plans must be consistent with the Coastal Standards and the Mat-Su Borough's District Coastal Plan once it is completed and approved. The Coastal Standards are presently in effect and all State and Federal actions must be consistent with them. Section 6AA C 80.130 states that:

(a) habitats in the coastal area which are subject to the Alaska Coastal Management Program include:

(1) offshore
(2) estuaries
(3) wetlands and tidal flats
(4) rocky islands and sea cliffs
(5) barrier islands and lagoons
(6) exposed high energy coasts
(7) rivers, streams and lakes
(8) important upland habitat

These habitats which are specifically defined in the Standards must be identified within the Susitna Hydro Study area during the feasibility studies. In addition, Section (b) states that habitats contained in (a) of this section shall be managed so as to maintain or enhance the biological, physical and chemical characteristics of the habitat which contributes to their capacity to support living resources. Specific guidelines are also provided for each coastal habitat. The Coastal Zone Management consistancy requirements are manadated in both the Alaskan and Federal CZM Acts and the Fish and Wildlife Coordination Act. The Question of consistancy with CZM standards goes well beyond the FERC licensing requirements and should be treated as a separate step in determining the feasibility of Hydro Power alternatives.

The Alaska Department of Fish and Game has a strong mandate under these laws to insure that adequate planning study and evaluation of the fish and wildlife resources in the Susitna Hydro Project area are completed and become a part of the decision making information used to determine project feasibility. If the project is constructed these studies will be the basis for mitigation plans or the formulation of mitigation studies to offset project impacts. Mitigation as defined in Section 1508.20 of the National Environmental Policy Act Implementation Regulations includes:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

ISSUES, PROBLEMS, CONCERNS AND RECOMMENDATIONS
REGARDING THE SUSITNA HYDRO PLAN OF STUDY

Project Review and Interagency Coordination

Because of the magnitude of the Susitna Hydroelectric Feasibility Study, continuous coordination in accord with the Uniform Procedures for compliance with the Fish and Wildlife Coordination Act will be best accomplished through formation of a Susitna Hydroelectric Steering Committee. The function of this committee would be to provide coordinated exchanges of information between the Alaska Power Authority and interested resource management agencies. Through this exchange, the concerns of all agencies involved would be identified early and hopefully prevent unnecessary delays in the progress of the feasibility study.

We propose that the Steering Committee be composed of representatives of resource agencies with responsibilities pertaining to the Susitna Hydroelectric Feasibility Studies (ADF&G, ADEC, ADNR, USFWS, USGS, and NMFS). This committee would provide for interagency coordination through joint review of project related materials and for development, through convening the committee, of more informed and uniform positions representing all resource interests to be transmitted to the applicant. This we believe provides that applicant with a more efficient process for information exchange.

The objectives of this committee are to:

1. develop plans of study which are based upon full agency participation throughout each phase of the planning process;

2. select the resource specialists who will undertake the required studies and investigations;

3. insure that the biological and related environmental studies, their timing, and technical adequacy are planned, implemented, and conducted to provide the quantitative and qualitative data necessary to: a) assess the potential impacts to fish and wildlife resources; b) provide the basis for mitigation and compensation of resource losses which will result from the project at the time of submisssion of a FERC license application; and c) select the favored mitigation and/or compensation alternative from the product generated by "b";

4. provide the forum for continued project review to jointly develop all aspects of the studies and to provide for a timely exchange of information and for redirection of studies should the accomplishment of specific objectives be in jeopardy;

5. assure that the studies are conducted in compliance with all state and federal laws, regulations, Executives Orders, and mandates as they apply to fish and wildlife resources; and

6. provide unified agency comments from the committee to the applicant.

The Susitna Hydroelectric Steering Committee should convene on a regular basis as dictated by planning and review requirements. However, it seems appropriate to meet at a minimum on a monthly basis to exchange reports and to be advised of progress toward objectives by the Alaska Power Authority and principle investigators. A record of agreements reached, recommendations and comments provided, and responsibilities assigned in meetings should be distributed to all parties involved.

Progress reports should be submitted to members of the committee quarterly. Comments from the committee to APA would then be submitted at a pre-established time thereafter. Comments provided to the Alaska Power Authority should be appropriately addressed and incorporated into project documents.

The participating members of the committee must have free access to all data collected during the study. In addition, principal project personnel should be accessible to members of the committee in case clarification of any aspect of the field studies is required.

Phase I Studies Initiation

The programs outlined in the work plans are scoped into a 24 month time frame for Phase I field work and one additional month covering Phase I annual report development during January 1982. The completion of several of these studies between January 1980 and January 1982 is not considered feasible.

A large amount of materials, equipment and scientific gear will be required for these studies. Many of these items will require ordering well in advance of the date on which they would be employed in the field. For example, major sonar and radio-telemetry development is anticipated for anadromous adult stock assessment and migrational work. The Bendix Corporation, the supplier of the sonar equipment the Department uses, has indicated a minimum of 18 months from order to delivery of sonar equipment. Also, members of the USFWS who have utilized radio-telemetry in the State have indicated an up to one year delay in the fielding of that equipment until radio frequencies are approved by the FCC.

New State personnel regulations may also affect this Department's timely implementation of studies unless an expedited procedure for employing staff dedicated to these studies is developed. If funds are released on January 1, 1980, several months will be required to obtain the staff needed to begin field work in 1980. These staff are crucial to the continued progress of specific planning and organizational work which

must necessarily begin as close to January as possible or further study delay will be encountered.

Allowance must be made for the impacts of equipment and personnel constraints on the ability of this Department to conduct the proposed fish and wildlife studies. These are realities which must be dealt with and are fundamental determinants of the adequacy of the work we have proposed to do.

Phase II Studies

A major position of the Department for the past several years is that many of the biological studies must be conducted through a five year period to provide the basic cyclical, environmental information needed to evaluate project impacts and the mitigation requirements or alternatives that are available. In the time availed us, we have not been able to provide a specific budget or work plan proposal for the studies that may be required in the years succeeding Phase I into Phase II, and it may not be reasonable to do so at this stage.

An acceptable Plan of Study must insure that studies are continued into Phase II. It is the position of this Department that study continuation and redirection should be based on the outcome of Phase I information. The proposed Susitna Hydroelectric Steering Committee, which has been proposed herein, is an important group, in our opinion, to insure scoping and budgeting of Phase II studies are executed in a consistent and systematic fashion.

Socioeconomic Considerations

Of primary importance to this Department is Objective 4: to determine the economic, recreational, social, and aesthetic values of the existing resident and anadromous fish stocks and habitat.

This objective will enable the Susitna Hydro environmental studies to assess the socioeconomic impacts on commercial, recreational, and subsistence users and industries supporting them. Over half of Alaska's growing population resides in the proximity of the impact area. Not only this population, but commercial fishermen, recreationists, and businesses from throughout the nation and other countries may be affected by the hydroelectric project. The popularity of Denali State Park and nearby Mt. McKinley National Park further attests to the high social, recreational, and aesthetic qualities of the area.

The basic problem in regard to the Susitna Hydro POS is to define and conduct the studies which will adequately evaluate the socioeconomic (monetary and nonmonetary) and cultural values of fish and wildlife and

the habitat that supports them when comparing them with other (more tangible) monetary resource values and uses associated with hydropower development.

It must be emphasized that to ultimately select the best uses of the natural resources of the Susitna Basin from which society will receive the most long term benefit, the net benefits (total benefit minus total costs) must be adequately evaluated. Consequently, values must be assigned to each potential resource use. When monetary terms are inappropriate, agencies will need to devise nonmonetary means of evaluating impacts to fish and wildlife resources. Existing regulations require agencies such as the Corps of Engineers (COE) or the Alaska Power Authority (APA) to search out, develop and follow procedures reasonably calculated to bring environmental factors to peer status with dollars and technology in their decision-making. NEPA directs action agencies to "the fullest extent possible":

> identify and develop methods and procedures which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations (42 U.S.C. S4332 (a) (B).

These methods should quantify habitat values which are equivalent to the extent and type of habitat affected by the planned project and estimate the quantity and quality of habitat needed to be acquired and/or improved to mitigate loss. It can then be determined if the socio-economic impacts of the project can be mitigated and at what cost. Furthermore, the Water Resources Council directs action agencies to devise nonmonetary means of evaluating fish and wildlife impacts:

> When effects cannot or should not be expressed in monetary terms, they will be set forth, insofar as is reasonably possible, in appropriate quantitative and qualitative physical, biological or other measures reflecting the enhancement or improvement of the characteristics relevant to the type of effect under consideration (38 F.R. 24797).

As a result, the often-cited excuse that the evaluation of supposedly "intangible" habitat values is difficult or impossible is no longer valid (Horvath 1978; Dwyer 1977; Copeland 1976; Morrow 1979).

Specific data to analyze both the nonmonetary and monetary socioeconomic recreational, social, and cultural values of the Susitna River Basin are lacking. It should also be stressed that an adequate assessment of monetary values by traditional methods must be based on commercial,

recreational, and subsistence use data which are not currently available and not being collected. Designs for this data collection and the data collection itself would best be done by the Department of Fish and Game, the traditional collector of data on these users. Therefore, this Department would like to actively participate in planning those portions pertaining to socioeconomics, recreational, cultural and aesthetic values of the Susitna River Basin.

Administrative Overhead and Time Delays

Overhead costs have not been included in the attached budget. The Alaska Departmment of Fish and Game (ADF&G) normally charges overhead to cover costs incurred by its Division of Administration. On most outside contracts, this amounts to approximately 10 percent of all costs except equipment. However, overhead is usually not charged on reimbursable service agreements (RSA) between State agencies. Susitna Hydroelectric Project studies will place an additional burden on the Division of Administration particularly during the first year when major equipment purchases and personnel hiring will occur. However, this additional work load is not likely to cost 10 percent of the proposed budget (approximately $600,000 during 1980 and 1981). Surplus money would presumably revert to the General Fund without accomplishing any purpose.

A more reasonable approach would be for the Division of Administration of the ADF&G, the Alaska Department of Administration, and the Alaska Power Authority to design a realistic program for administering the funds and to have APA reimburse the appropriate agencies for actual costs. These costs should be added to the overall budget.

The time normally required to process purchase requisitions and contracts is likely to create problems with APA's time table. A similar problem developed when the Legislature appropriated Bristol Bay disaster relief funds during 1974 after a failure in the salmon run. The problem was solved by funding a position in the Anchorage office of the Department of Administration to expedite purchasing. This allowed the rapid purchase of items without violating purchasing procedures and without excessively burdening the State's regular administrative staff. A similar approach would be beneficial to the Susitna Program. It is recommended that APA and Administration consider it as an option.

Monitoring & Surveillance

Monitoring and surveillance of Phase I and II project activities to minimize the impact of these activities on fish and wildlife and their habitats will be necessary.

The Susitna Hydro Coordinator will be responsible for assuring that the Department reviews and comments upon the host of State and Federal permit actions which may be required each year for land and water use.

He will be specifically responsible for ADF&G Title 16 permit applications review and development stipulations to protect fish and game.

Estuarine Studies

The Department of Fish and Game has not attempted to detail possible estuarine studies for the preliminary final POS. These studies can be delayed pending the outcome of Phase I studies.

If demonstrable hydrologic and water quality changes near the mouth of the Susitna River are shown or projected (based on the analysis of 1980 or 1981 data), estuarine studies should be initiated to identify the potential for project impacts on that environment.

AQUATIC STUDIES

Introduction

The Susitna River drainage, located north of Cook Inlet, encompasses an area of 19,400 square miles. The free-flowing Susitna River is approximately 275 miles long from its source in the Alaska Mountain Range to its point of discharge into Cook Inlet. The mainstem river and its major tributaries originate in glaciers and carry a heavy silt load during the ice-free months, but there are also many smaller tributaries which are perennially silt-free.

The construction of power dams on the Susitna River will adversely affect portions of the fish and wildlife resources of the Susitna River Basin. The two dam system proposed by the Corps of Engineers (COE) would inundate in excess of 50,500 acres of the Susitna River Basin aquatic and terrestrial habitat upstream of Devil Canyon. Regulation of the mainstem river will substantially alter the natural flow regime downstream. The transmission line corridor, substations, road corridor, and construction pad sites may also impact aquatic and terrestrial communities and their habitat. Historically, the long-and-short-term environmental impacts of hydroelectric dams have adversely altered the extremely delicate balance of ecosystems (Keller 1976; Hagan et al 1973).

Background knowledge of the Susitna River Basin is limited. The proposed hydroelectric development necessitates gaining a thorough knowledge of its natural characteristics and populations prior to final dam design approval and construction authorization in order to protect the aquatic and terrestrial populations from unnecessary losses. All engineering, hydrological, biological, and other project feasibility study activities conducted by the various governmental and private agencies will also have to be monitored and regulated to prevent ecological disturbances.

A survey of the fishery resources should cover complete life history cycles. A 30 month program prior to license application (Phase I), although supplying essential information about the fishery, is inadequate and should be continued through supplemental studies in Phase II. The proposed studies should be conducted for a minimum period of 5 years.

Five species of Pacific salmon (chinook, coho, chum, pink, and sockeye) inhabit the Susitna River drainage during their freshwater life history stages. The majority of chinook, coho, chum, and pink salmon production in Cook Inlet occurs within this drainage. An anadromous smelt, the eulachon, also utilizes the lower reaches of the river.

Cook Inlet is one of the major anadromous fish producing areas in the State of Alaska. The commercial catch of salmon reported for Cook Inlet during the five year period from 1971 to 1975 averaged over a million fish per year, and represented an average of 7.4 percent of the total catch for the State of Alaska. In addition to the commercial catch of

salmon, the recreational fisherery took about 90,000 salmon a year and the personal-use fishery, an additional 10,000 salmon per year. Sockeye, pink, and chum salmon are by far the most important commercial species in the area, making up over 90 per cent of the total catch from Cook Inlet; coho and chinook salmon make up the remainder. Chinook and coho salmon also are the species most favored by the recreational fishermen.

Grayling, rainbow trout, Dolly Varden, burbot, lake trout, and whitefish are some of the important resident fish species common to this system. Approximately 50 percent of the statewide sport fishing effort occurs within the Cook Inlet area. The recreational marine fishery is, however, very limited with the exception of a popular fishery at the vicinity of Deep Creek on Cook Inlet. The majority of the anadromous sport fish harvest occurs as the fish approach their spawning areas. Most, anglers within the Cook Inlet area show a preference for salmon rather than resident game fish when both types of fisheries are available. Resident populations are fished more heavily during fall and spring months during the absence of salmon runs.

Therefore, the proposed Susitna River hydroelectric project will have various impacts on both the indigenous organisms and the natural conditions within the aquatic environment. Potential impacts to fish populations are the most obvious source of concern due to their socioeconomic and recreational importance to the people of Alaska and the Nation.

STUDY PROPOSALS

Individual study proposals are designed to provide the necessary background information to enable proper evaluation of impacts. Six general objectives have been outlined:

1. Determine the relative abundance and distribution of adult anadromous fish populations within the drainage.

2. Determine the distribution and abundance of selected resident and juvenile anadromous fish populations.

3. Determine the spatial and seasonal habitat requirements of anadromous and resident fish species during each stage of their life histories.

4. Determine the economic, recreational, social, and aesthetic values of the existing resident and anadromous fish stocks and habitat.

   The Department has not developed a specific work plan for this objective but strongly believes the Acres-American POS must be strengthened to cover fish and wildlife concerns during Phase I.

5. Determine the impact the Devil Canyon project will have on the aquatic ecosystems and any required mitigation prior to construction approval decision. This is the primary objective of both Phase I and II studies. This will be discussed in detail in the Phase II work when it is written.

6. Determine a long-term plan of study, if the project is authorized, to monitor the impacts during and after project completion. This is also an objective of Phase II.

The study areas are generally categorized within the following locations:

A. Cook Inlet area

B. Cook Inlet to the Yentna River confluence

C. Yentna River to the Talkeetna River confluence

D. Talkeetna River confluence to the Devils Canyon dam site

E. Devil Canyon dam site to the Tyone River confluence

F. Proposed transmission line corridor(s), access roads, and construction pad sites

Scaling of the proposed studies with respect to timing, geographic locations, and intensity has been done with consideration of the resource knowledge available for each of the geographic locations identified above.

Enclosure 4

ALASKA POWER AUTHORITY

334 WEST 5th AVENUE · ANCHORAGE, ALASKA 99501

Phone: (907) 277-7641
(907) 276-0001

02-82-13.06

August 19, 1982

Tom Trent
Su Hydro Aquatic Studies
Coordinator
Alaska Dept. of Fish & Game
2207 Spenard Road
Anchorage, AK 99503

Dear Tom:

Mark Robinson, FERC's environmental manager for Susitna, called this week to express his surprise that little 1982 field season data would be incorporated in the February, 1983 license application. Mark's reaction is identical to what ours has been: frustration with the slow transfer of data from the field to the impact analysts and the mitigation planning team. Mark indicated that FERC's acceptance of the license application for processing is very much contingent upon 1982 data being included.

We want to work with you to find means to achieve more rapid transfer of results, at least for some key indicators. I have directed Richard Fleming to spearhead this effort; he will be contacting you shortly, along with John Hayden and Larry Moulton.

Your dedication to this goal is essential if the license application is to be accepted by FERC. Thank you for your help.

Sincerely,

Robert A. Mohn
Director of Engineering

cc: Commissioner Skoog
John Hayden, Acres
Richard Fleming
Mark Robinson, FERC
Keith Bayha, USFWS

Su Hydro Aquatic Studies
2207 Spenard Road
Anchorage, Alaska 99503
File: 02-82-13.06

ENCLOSURE G

September 13, 1982

Mr. Robert Mohn
Director of Engineering
Alaska Power Authority
334 West 5th Avenue
Anchorage, Alaska 99501

Dear Bob:

Thank you for your letter of August 19, 1982 regarding Mark Robinson's concerns about inclusion of 1982 field season data in the February 1983 license application.

In previous discussions this spring with APA, Acres, AEIDC and Woodward-Clyde staff, it has been recognized that complete reporting of 1982 data would generally be accomplishable within the time lines established in our current RSA. It was indicated to us by Acres on several occasions that the new reporting structure of AEIDC and ADF&G in post-project and preproject analysis of data, respectively, would not be driven by the FERC license application deadline.

We will, however, do our utmost to develop a list of "key indicators" as you have have suggested for early transmittal in draft form. I hope we can avoid partial data transmittals, however, as these can create confusion for data analysts.

Currently, our staff is working on the basic data and habitat/fisheries relationship report outlines. Once we have these in hand we will evaluate what is going to be presented in our reports and prepare a "key indicator" list with APA, AEIDC, Acres and Woodward-Clyde staff that we can use to direct early data reduction and reporting efforts.

Sincerely,

Thomas W. Trent
Su Hydro Aquatic Studies Coordinator
Sports Fish Division

cc: Commissioner Skoog
K. Bayha
M. Robinson
R. Fleming
L. Moulton
G. Wilson
J. Hayden
R. Logan

bcc: L. Corin
A. Carson
L. Heckart
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Project Leaders

ALASKA POWER AUTHORITY

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March 18, 1983

Mr. Gerald Wilkerson
The Legislature Budget and Audit Committee
Division of Legislative Audit
Audit Division
Pouch W
Juneau, Alaska 99811

Dear Mr. Wilkerson:

The Alaska Power Authority acknowledges receipt of your audit entitled "A Special Report on the Department of Fish and Game, Susitna River Hydroelectric Project for the Fiscal Years Ended June 30, 1982, 1981, and 1980".

Please note that events occurring since the investigation have overtaken the third recommendation. As a result of extensive coordination and intensive effort, biological data collected by the Aquatic Research Team during the summer of 1982 was incorporated in the February 1983 Federal Energy Regulatory Commission (FERC) license application to a substantial degree. Complete ADF&G data reports are being transmitted to FERC during March 1983 as companion documents to the license application. FERC is expected to determine, during the next month, that the environmental portions of the license application are acceptable for processing.

With respect to your first recommendation, work is presently underway to identify the objective and scope for next summer's field season.

Thank you for the opportunity to comment on this report, as well as on the earlier draft.

Sincerely,

Eric P. Yould
Executive Director