Prince William Sound Management Area
1991 Annual Finfish Staff Meeting Notes

By: Wayne Donaldson
Steve Morstad
and
Ellen Simpson

Regional Informational Report[1] No. 2C91-09

Alaska Department of Fish and Game
Division of Commercial Fisheries, Central Region
333 Raspberry Road
Anchorage, Alaska 99581

March 1991

[1] Contribution 91-09 from the Cordova area office. The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

TABLE OF CONTENTS

LIST OF APPENDICES

INTRODUCTION

The 1991 Prince William Sound annual finfish staff meeting was held at the Anchorage Regional Office from March 5, to March 7, 1991. This annual meeting serves as a forum for area and regional staff to coordinate and plan for the upcoming herring and salmon field seasons. This data report is prepared to archive the salient points of that meeting.

ATTENDEES

In attendance: James Brady (chairman), Sam Sharr, Jodi Smith, Evelyn Biggs, Tim Baker, Linda Brannian, Steve Moffitt, Steve Fried Jim Vansant, Wayne Donaldson, Dennis Haanpaa, Betsy McCracken, John Wilcock, Ken Chalk, Mark Willette, Steve Morstad, Ken Florey, Ken Roberson, Ellen Simpson, Brian Bue, Richard Gates (Headquarters), Bob Clasby (Headquarters), Dave Lorring, (Fish & Wildlife Protection (F&WP)), Jim Fall (Subsistence Division), Lee Stratton (Subsistence Division), Andy Hoffman (Sport Fish Division), Craig Whitmore (Sport Fish Division).

ASSIGNMENTS

Baker--work up herring biomass projection for 1992.

Biggs--Write memo to area and regional staff on her subjective opinion during spawn deposition dives of the effects of wild roe on kelp harvest on kelp beds.

Biggs--check with Wade Loufborrow concerning the mechanical status of R/V Polaris.

Brady, Brannian, Fried--establish date for transfer of herring forecasting duties to the Cordova area office and decide whether this is a management or research function.

Brady--locate a computer to be dedicated for receiving telex communications at the Cordova office.

Brady--issue an emergency order with Lee Stratton to allow hand picking of roe on kelp for subsistence during pound fishery.

Brady & Florey--investigate boat shed expansion.

Brady & Florey--investigate six month handyman position.

Brady--follow through on commercial rockfish catches.

Biggs, Wilcock & Sharr--draft a bunkhouse/warehouse/yard policy for submittal to the regional staff.

Brannian--work up sample size strategies for coded wire tag (CWT) releases at Gulkana.

Brian Bue--hire the oil spill biometrician for Cordova.

Cordova Management staff--1990 Annual Management Report (AMR) completion target date is June 1.

Donaldson--check on avgas from Cordova Air for use on the Montague and Sound Pacer during the herring fishery.

Donaldson--Complete salmon preseason outlook by April 1.

Donaldson--memo to Headquarters requesting a change in the statewide regulations to allow latitude and longitude to be converted from seconds to hundreds of a minute.

Florey--obtain the final sign-off for hatchery annual management plans (AMP's).

Florey--follow up on the Gulkana policy paper in Juneau.

Fried--check on the exact location of PCN's.

Fried--write narrative for new research reorganization.

Haanpaa--contact Oceantech and ask that they travel to Alaska to fix the hardware and software problems.

Sharr--Review and update egg maturity form which processors use to report roe percent.

Sharr--contact Phil Mundy about the use of cameras to record escapement.

Simpson--send Ken Middleton a map and a copy of the emergency order issued in 1990 for the oil impacted beaches.

Simpson--Send hatchery AMP's to fishery organizations.

Simpson--work with F&WP and inform them of the wild kelp trimming problem. Write letter to wild kelp permit holders to inform them that all kelp must be weighed before trimming and the untrimmed weight must be reported on the fish ticket.

Simpson--add to hatchery AMP's a paragraph stating the cost of the CWT program and who's paying for it.

Simpson--prepare new statistical area maps and send copies to Anchorage and Computer Services in Juneau.

Vansant--notify Mala and Donaldson of the single side band (SSB) duplex frequencies.

New research Fisheries Biologist (FB) III--Copper/Bering River Coho catch and escapement.

HERRING

The herring biomass projection for 1990 is estimated at 125,000 tons, twice the expected amount. The 1991 projection is approximately 95,000 tons, which is dominated by age seven fish. A twenty percent exploitation equals 19,300 tons for all fisheries. Forecasting duties may be passed to the Cordova Area office. Assignment for Brady, Brannian and Fried to come up with date for transfer of forecasting duties to the area office and decide whether this is a management or research function.

Herring mortality schedule increases dramatically from age 7 to 8. If no recruitment occurs in 1991, then a conservative management strategy for 1992 should be considered to maintain spawning biomass. Baker to work up biomass projection for 1992.

The only Board of Fisheries action for herring in 1991, is the change for the roe on kelp in pound fishery, limiting the number of blades. Management strategies for seine sac roe fishery include partial closure of major biomass area(s) and allow fishing on smaller biomass. This strategy should allow the fishery to keep pace with processing capacity. The potential for two or three openings exists and processor capacity will be closely monitored to maintain quality and prevent waste. Market for herring in 1991 is weak. Processors are concerned about the quality of Prince William Sound herring due to belly burn. Daily processing capacity (in recent years) for seine fish is about 2,500 to 3,000 tons.

Timing of herring spawn generally varies from the North Shore to Montague Island. Bigger, older fish are generally the first to show up. Recruits (age 3 & 4) show up later in the season.

Cooperative Fisheries & Oceanographic Sciences (CFOS-University of Alaska) may put in a permanent oceanographic station east of Naked Island to record water temperature, salinity, dissolved oxygen and wind speed. This may help to understand the timing of the herring arrival. The information will be real time data. The R/V Montague also has a conductivity, temperature, and depth (CTD) probe on board.

The potential for several openings in different areas exists for the wild kelp fishery. One problem reported from the 1990 fishery was the reported hygrading of kelp by trimming. Trimmed product is not being reported on fish tickets. Simpson will meet with F&WP and inform them of this problem. Simpson will send a letter to all wild kelp permit holders on the Department's concern of wild kelp harvesters trimming kelp. The letter will also state that all kelp will be weighed at the time of delivery before trimming and reported on the fish ticket. The Department may develop waste projections and use these in the future. Processors should communicate with fishermen to convey the criteria for salable kelp.

Biggs will subjectively rate the observed effects of harvesting wild spawn on kelp through her dive survey work. Laminaria has the fastest growth rate. Ribbon kelp is second and hair kelp grows slowest. Areas open to wild harvest should be rotated to conserve kelp.

Haanpaa passed out a standardized reporting form for announcements of the status of herring fisheries. This reporting form standardizes the information from area offices.

Regional involvement onboard the R/V Montague for 1991 herring seine fishery includes Florey, Brady, and possibly Baker for the sac roe season.

The F/V Julia Breeze will be anchored in Galena Bay with Steve Morstad for the pound fishery. F&WP may also station a vessel next to Julia Breeze for additional bunk space.

Simpson will have lead on gill net and wild harvest fisheries. She may have to be based on a tender if sac roe seine fishery moves with the R/V Montague away from where the gill net fishery is prosecuted.

For age-weight,length (AWL) sampling, Wilcock will line up test fish boats prior to seine openings. Sample size will be the same as 1990. Samples will be pooled if no statistical differences exist between individual samples. Sampling will be conducted for all fisheries. Samples will be obtained both pre and post spawn. Post spawn sampling will look at natural egg retention. Egg maturity form which processors use to report roe percent will be reviewed and updated by Sharr.

Morstad reviewed results of the 1990 pound project which are summarized in his report to the Board of Fisheries. One interesting figure he noted was that 44% of eggs were retained by females. Of the 56% of eggs released, approximately half the eggs were deposited on kelp, the remainder on web.

New stipulations of the commissioner's permit for the pound fishery will limit the number of kelp blades annually to achieve the

inseason harvest objective. Lines of kelp will be marked with a gill net type float marked with the permit number. Kelp blade weights will be determined each year. Average production per blade with roe will be determined at the end of each season.

F/V Julia Breeze is retained for $1350/day from approximately April 7 - end of pound fishery for monitoring and sampling. Julia Breeze has brailing capability this year. Sport Fish Division may use vessel if pound fishery ends early. Twenty two pound groups are anticipated this year verses 19 groups in 1990. AWL samples will be taken from each test pound. Each test pound will be brailed for one more year to verify the 1990 results.

Personnel available for pound fishery monitoring: Morstad, Richardson, Vania, Wilcock's sampling crew (4), Atkinson & Gilman, Sharr, Donaldson. Vessel contingency - Polaris on site April 1, for spawn deposition.

Harvested kelp from each pound will be kept in separate totes by permit holder until totes reach the processor. The 1990 pound violations for over production are still in court.

Spawn deposition biomass projection for 1991 is plus or minus 25%. Evelyn estimates that 10% of deposited eggs die. The depth at which eggs are deposited and storm action are important mortality factors.

R/V Polaris will be on site April 1 - May 15 for herring spawn deposition. Egg mortality and egg loss projects are conducted near the Fairmont Island area. Biggs needs three other vessels. Biggs to check with Wade Loufborrow to find out mechanical status of R/V Polaris.

Spawn deposition personnel will be onboard from April 5 - May 8. Divers from southeast Alaska will not be participating this year. Divers for 1991 are Morstad, Biggs, Bechtol, Norman, Haley, Becker and Geiger.

The region will plan to hire divers into permanent positions. Commercial Fisheries will provide dive training. Dive training will be offered to Steve Moffitt to get him up to speed for the 1992 season. Intent is to budget and train one person/year (either new or existing personnel) within the region.

Aerial surveys for herring will begin in late March early April. Donaldson will calibrate aerial estimates with Simpson, Biggs and Morstad. F&WP may be able to provide some airplane support during the height of the fishery. Donaldson to check on avgas from Cordova Air for use on the Montague and Sound Pacer for aerial survey use during the fishery.

F&WP would like the department to not schedule simultaneous openings in two different areas during the herring fishery. They won't be able to cover both areas. They will not have any divers this year to cover the kelp fishery.

HEADQUARTERS REVIEW

Budget hearings are complete for the House & Senate. They want Department (ADF&G) money reinstated, however there is a great deal of uncertainty about Governor Hickel's agenda. Hickel decrements originally totalled 2.1 million, latest projections now total 1.0 million as Exclusive Economic Zone (EEZ) & sea cucumber projects are back in the budget. Florey asked for a reprioritization of projects or a reallocation from Juneau after the budget is finalized. Fish & Game Fund (revenues generated by fishing violations) can be used for special projects.

No permanent full time staff will be cut. Seasonal staff may be trimmed. Projects with long term databases will have high priority for continued funding. R/V Montague may be funded by oil.

Representative Grussendorf introduced legislation to allow Commercial Fisheries Entry Commission (CFEC) to establish a 4-year moratorium to stop entry into developing fisheries until a determination of fishery impacts can be determined.

Preaudit looks good, some regional money was returned to Headquarters. Vacancy factors have helped to create the budget surplus in addition to oil funds and the early retirement program. Current operations for all projects are above their budgeted amounts. This will present a problem for the region in the future.

Allocations for the entire fiscal year were recently distributed (FY 91) to oil projects, therefore all oil projects are funded until June 30.

SUBSISTENCE

The Board of Fisheries will only take up proposals which present a pressing conservation issue or proposals for which subsistence needs are not currently being met.

Existing regulation (5AAC 01.610) for subsistence harvest of roe on kelp only allows subsistence take during open commercial fishing periods. Recent fisheries were short and have not allowed adequate time to subsistence harvest roe on kelp. Annual take is from 1,000

to 3,000 pounds. The department will window the openings of the subsistence fishery to mirror the commercial pound fishery using methods and means. Brady will issue an emergency order with Lee Stratton to allow hand picking of roe on kelp for subsistence use during the pound fishery.

There is a potential for increased take of salmon on the upper Copper River due to new subsistence criteria. Ken Roberson & Craig Whitmore will give a staff report to the Board of Fisheries. Roberson is proposing to allow personal use below the bridge, subsistence above the bridge.

Ken Florey will get the Copper River subsistence/personal use proposal moved forward on the agenda so Ken Roberson will be available to attend the meeting. If there is no cap on the subsistence harvest this year, we could be looking at an additional harvest of 30,000 fish. Both ADF&G proposals assume the Board doesn't want to reallocate.

CODED WIRE TAGGING and DAMAGE ASSESSMENT

Wild stock and hatchery pink salmon tagging occurred in 1990 and returns are expected in 1991. Recent hatchery contributions are changing the species composition in the Sound. Research staff need to know the stock composition of these returns.

Returns in 1990 were above forecast and fish were sent to other areas of the state for processing, seasonals were sent to those areas to scan fish.

The coded wire project data analysis data base is in place. District specific area catches will be available inseason. Inseason catch allocation will be available by facility.

The oil spill project "Injury to eggs and preemergent fry" is continuing. An egg dig occurs in the fall and preemergent work occurs during March-April. The project looks for differences between oiled to unoiled areas.

Another oil project "Injury to salmon spawning areas" will also occur in 1991. Total return (catch & escapement) both pre & post spill are related to possible differences with the degree of oiling. Sharr is comparing escapement estimates using aerial & foot surveys. A total of 209 index streams have been surveyed since the early 1960's. Ground surveys are not used to compliment aerial surveys but look at species composition, and distribution within the stream. Sharr is assembling a new resident time estimate (stream life). The old estimate of residence time is from Olsen Bay.

Paired counts (aerial & ground) estimate accuracy of aerial surveys. Weir streams obtain actual counts. Neither aerial nor ground surveys allow precise estimates. Ground surveys are more accurate for species composition, however when combined with stream and mouth counts the accuracy of survey estimates is good. Factoring in stream life estimates substantially improves the accuracy.

Sharr will have the expanded escapement counts based on the aerial surveys along with the old method of index numbers. Sam plans to have the Rbase algorithm program set up this year. Only ground surveys will be done by the weir crews.

During 1991 more weirs are planned and the dedicated ground survey program will not be conducted. All ground surveys will be conducted from weir camps.

Richard Gates, the biometrician in Juneau working on the run reconstruction talked briefly on his work. He will be looking at the tagging data and identify if pink salmon are moving from one district to another.

The 1991 coded wire tags are on their way to the hatcheries, Carol Peckham will be running the CWT recovery project. From 10 to 13 seasonals will be in Valdez, 20 in Cordova. Of the 20 in Cordova, 3 will transfer to the hatcheries. Sharr is trying to work with the processors to get a hold of the tender's logbook of fish deliveries.

Dan Sharp will be in charge of the CWT weirs for both smolt and adults. Weirs for the 1991 season will be operational from July 1 to September 15, and are; Irish Creek-adult weir, Herring Bay-CWT, Loomis Creek-CWT,Totemoff Creek-CWT, Cathead Bay-CWT, O'Brian Creek-CWT and Adult, Hayden Creek-CWT and adult, Jackpot-adult, Eshamy-adult, Coghill-adult. Mark Willette spoke briefly on his juvenile pink salmon work in the Sound.

The Montague schedule for the weir projects will consist of weekly trips to each camp. These trips are possible due to the elimination of the stream walking trips.

Sam and Brian are working on a special aerial survey project that will require additional flying time. The project requires flying all streams within a given quadrant to assess escapement for unsurveyed streams.

ADMINISTRATION

Administration overview by Wayne Prigge:

A) Jo Mala will travel to Anchorage for a training session.
B) Leave cash-in for long term seasonals cuts project cost. Place an "R" in the annual section of leave slip.
C) Leave slips must be sent to Anchorage in a timely manner.
D) Evaluations need to be completed on time. If evaluations are more than six months overdue, the supervisor will receive a letter from the commissioner.

When personnel are moving from one project to another notify Jo Mala ahead of time. Permanent position control numbers (PCN's) can now be split coded (1000 series PCNs) between general fund and oil. Communicate coding changes on time sheets by making notes for regional staff. Overtime compensation with annual leave verses over time pay does not benefit the seasonal employee. Have them speak with Wayne Prigge for more information. Leave cash-out can now be split between two projects if a seasonal works two projects.

REGIONAL PLANNING TEAM (RPT) REVIEW

Simpson is working on the finding-of-facts concerning the new salmon allocation plan. This will be published as a regional information report. March 21-22 is the next RPT meeting, issues that are to be covered: review of the remote release sites, potential harvest areas for the remote release sites, phase 3 planning of the production and planning from Prince William Sound Aquaculture Corporation (PWSAC) along with department concerns from the hatchery AMP's will be presented to the RPT. The ADF&G staff needs to become further involved with the planning team. Mark Willette needs to get on the Production Planning Team.

Simpson gave a run down on the hatchery AMP's stating PSWAC's cost recovery goal of $9.0 million. They plan to harvest 7.6 million pink salmon using an average weight of 3.3 lbs and a price of $0.28 dollar/lbs. Ellen will also include the CWT program cost and who is paying those costs. Ken Florey will take the AMP's to Juneau and get the needed signatures. Ellen will also send out the AMP's to interested fishing organizations.

Main Bay sockeye egg needs are 400,000 from Coghill and 800,000 from Eshamy. The fry released back to Coghill Lake will be fry from eggs originally taken at Coghill Lake, not from the eggs taken at the Main Bay hatchery. If no eggs are taken from Coghill no fry release will occur.

Gulkana will tag at Crosswind and Summit Lake. PSWAC is funding Gulkana at 100%. The Fisheries Rehabilitation and Enhancement Division (FRED) is still running the hatchery. Ken Florey will follow up with Headquarters on the status of the policy paper.

Ken Roberson reviewed the Gulkana I and II hatcheries. Currently Gulkana II has 1.25 million sockeye and 50 - 60 thousand chinook eggs in incubators. This is the site where a short term rearing facility is planned by PWSAC. This would increase survival without increasing brood stock needs. At Gulkana I, 30.1 million sockeye eggs are in incubators. So far it appears the procedures to prevent Infectious Hematopoietic Necrosis (IHN) have been successful. Linda Brannian will work up sample size strategies for CWT releases at Gulkana.

Jodi Smith is recording the location of all egg takes and release sites in the Sound and the Copper River Basin, from 1921 to present. This will be documented in a regional information report.

FORECASTS

The herring preseason outlook is out and the salmon outlook is supposed to be out by April 1, at the Salmon Harvest Task Force (SHTF) meeting. Donaldson will include the new management plan for the Sound with intent language and dates.

Sharr now has facility specific survival rates for pink salmon. Ken Roberson thinks the chinook harvest projection is too high at 41,000 and believes the lower limit is more in line, which is 31,000 fish.

Roberson is working on the Copper River forecast report. He wants to postpone report completion until he has a good product including historical techniques. Brady wants a time frame for the report; Roberson feels it can be completed by the 1992 staff meeting. Some discussion then ensued regarding chinook forecasts. Other areas of the state put a range around their chinook forecasts. The chinook forecast is important to us to gauge the impact on sockeye management, not for the convenience of the processors.

When should we open the Copper River this year? If it opens on May 13, only 3,000 sockeye probably would be harvested and we'd catch more kings. If we waited until May 16, we'd catch 80,000 sockeye. It was decided to go with a May 16 opener.

In 1990 the combined sockeye catch and escapement in the Bering River District was below the historical escapement. Last year's catch of 8,000 sockeye was mostly five year old fish. The poor recent sockeye escapement in the Bering River District is of

concern and management strategies were discussed including closing the district completely and delaying the opening date. Sockeye escapement usually isn't visible from the air until a month after most of the fish are taken in the commercial fishery. In 1990 most of the catch was taken during the first period and effort was virtually nonexistent after that period. There is no justification for a complete district pre-season closure but we could postpone the opening date until June 20, and open it concurrently with the Copper River District and then look at a closure.

Coho management for the Copper/Bering rivers will be status quo for 1991 with one 48 hour period each week. Aerial survey results will be used as escapement indices. There will not be a coho weir this year. We have a problem with the fishermens' perception of coho abundance. The past couple of years there was a lot of fish in the streams accessible from the highway. This has led some fishermen (not all) to assume that this is true in other areas as well. Florey asked a hypothetical question - what would you do if there was a fiscal windfall for a coho project? Brannian felt that since it's not a mainstem system aerial surveys are probably best. Brady wanted to set escapement goals. Sam sees a need for historical coho catch and escapement data to continue development of escapement indices or goals so we can demonstrate we haven't had "dartboard management". This will be an assignment for the new Fisheries Biologist (FB) III. There is also a need for stream life information for coho salmon. A permit will be needed from the Forest Service if a study is planned for 18/20 Mile Creek.

At the February 20 SHTF meeting, Donaldson was appointed chairman and April 1 is the next meeting. During the Feb 20 meeting concerns were to modify some of the enlarged closure areas and funding for the extra aerial survey flights. A special committee was appointed to find the $35,000 to fund the extra plane. Gill netters are going to recommend simultaneous openings in the Sound and the flats. A discussion was held on the hatchery cost recovery program. If PWSAC falls behind on cost recovery during 1991, how will the department manage the fishery?

ESCAPEMENT

Brady will come to Cordova and work with Donaldson and the new supplemental aerial survey pilot to insure consistency on aerial surveys.

Sockeye aerial escapement surveys of the Delta will begin in late May. Donaldson will go along with Slim in a Cessna 185 for at least a few surveys. In addition, effort surveys are scheduled for the first four fishing periods on the Copper River Flats.

Morstad raised the possibility of using a remote video camera at Martin River to document coho escapement. He has already contacted Mike Jackson to make a weatherproof housing and tower for the camera and will conduct a feasibility study at Eyak Lake outlet. Phil Mundy is doing a similar project, Sharr will contact him for details.

The Upper Copper River aerial survey program will be $2,000 short this year with a budget of $6,000. Sport Fish Division has provided some money to cover the king surveys and some of the sockeye surveys. Roberson will fly the surveys. If Commercial Fisheries Division could contribute the needed $2,000, one additional round of streams could be made increasing the accuracy of the expanded escapement estimate as well as increasing our chances of surveying the peak escapement. Roberson will follow the same methods as in previous years, surveying the index streams first and then moving on to the supplemental streams.

Morstad outlined some changes at Miles Lake as a result of the sonar meeting in Anchorage. The south bank will be monitored every two hours for 15 minutes or 100 fish. If the counter count and the oscilloscope count are not within 15%, fish velocity will be adjusted and the procedure repeated until the 15% agreement is attained. This same procedure will be used on the north bank every four hours. Linda Brannian will visit the Miles Lake site during the season to provide the project with biometric support. Morstad has sent the Coast Guard a letter requesting their help in setting up the sonar site but has not received a reply. One of the technicians is not returning this year, but this should not be a problem.

John Wilcock reviewed the AWL sampling strategies for 1991. The second Bering River sample will be dropped but the Copper River sampling schedule will remain status quo. Roberson will try and take some of the upper Copper samples from boat fishermen this year. For Prince William Sound, AWL sampling the number of strata for Eshamy and Coghill chum will be increased. John is also going to add at least four strata for Coghill coho and one for Eastern/Northern Districts coho. The pink length and weight sampling will also be beefed up. Escapement AWL sampling will be the same as in years past. Sharr is going to bring in Tony Gharrett to do some electrophoretic sampling this summer.

OIL IMPACTS

Tom Schroeder (Exxon) requested a meeting in Cordova in early February 1991. At that meeting Exxon indicated they'd assist ADF&G in monitoring any oiled areas. During 1991 Donaldson and Simpson will look at the beaches that were closed last year. Exxon will

assist with helicopter support. Brady will talk to Donegan about the need for the Memorandum of Understanding (MOU) in 1991. Brady will also talk to Habitat Division about ending the clean-up on anadromous streams.

Ken Middleton gave a brief rundown of his planned 1991 season. A total of 33 streams will be surveyed for oil. Surveys to start 26 April to 5 May then continue 12 May, utilizing five survey crews. The whole operation is up in the air depending on funding. Ellen will send a map and the emergency order which closed the beaches in 1990. Tim Loftkin is the contact man for surveys.

MARKERS

Vansant has a marker trip June 10-19. He will start in the Port Valdez area, work on the SHTF markers, and fix the hatchery boundary markers and standardize them. Markers for the new Perry Island subdistrict will be installed. Mike Jackson will be contacted to make up the new markers. A possible August marker trip will be considered to do stream marker maintenance. Donaldson will send a memo to Headquarters requesting a change in the statewide regulations to allow latitude and longitude to be converted from seconds to hundreds, as this is how vessel electronics output.

The Copper River marker bid is out. This item is budgeted for $10,000. Personnel for the marker trip will be Morstad, John Richardson or Tom Vania. This year once the markers are in place that is where they will stay. If fishermen have any problems with marker placement they can call Florey with questions. Morstad and Donaldson plan to have discussions with fishermen on how to solve the marker problem in the future. The Copper River Markers will be taken up at the April 1 Salmon Harvest Task Force meeting.

Jim Vansant has started a data base (Reflex software) to document marker maintenance. He expressed the need for help with the data base to get all the information entered.

MISCELLANEOUS

R/V Montague and Pandalus now have radio teletype capability, which transfers hard files from vessel to office. Lotus files can also be sent. Characters are more limited than a standard keyboard. Capability exists at the Cordova office, R/V Montague and R/V Pandalus. Encryption option will be available soon. VHF radio onboard R/V Montague now has enforcement frequencies and repeaters

are in various locations of the Sound. Brady will locate a computer to be dedicated for receiving telex communications at the Cordova office. Vansant and Desjardin have duplex capabilities on singe sideband (SSB). Vansant will notify Mala and Donaldson of the duplex frequencies.

Haanpaa will contact Oceantech and ask that they travel to Alaska to fix the hardware and software problems that the vessels have experienced for the past two years.

Seasonals for Coghill weir will maintain Coghill PCN's. Steve Fried will check on the PCN's exact locations.

The 1989 AMR is complete and back from the printer. The 1990 AMR has a completion target date of June 1, 1991.

Donaldson reviewed current statistical area map and asked for input for 1991 changes. The new Perry Island Subdistrict will be 222-35. This will eliminate any confusion with the old Unakwik area 222-50. Ellen was given the assignment to prepare new maps and send copies to Anchorage and Computer Services in Juneau. It was suggested that a historical report be prepared detailing the district boundaries over time. The discussion then turned to the RBase catch database since a regional information report documenting the database would be an appropriate place to document district changes. The database still needs some error checking, both on the fishing dates and the catch information. Sam will investigate the possibility of using run reconstruction money to fund a short term person to do this work.

Ken Florey distributed the reorganizational handout and discussed yesterday's project review meeting attended by oil spill PI's and regional staff. The new FB III would be an oil spill funded PCN as would all but one FB II. The FB II with NRDA 3 & 1 responsibilities is currently a FRED oil spill PCN held by Dan Sharp. It would become a Commercial Fish Division PCN with input from FRED Division. As WEIR CZAR all weirs, including Coghill and Eshamy, would be supervised by this position. Sam would be responsible for National Resource Damage Assessment (NRDA) Studies 1 thru 3 and the new FB III would have NRDA Study 11 as well as herring and salmon catch & escapement and provide Copper/Bering rivers' management support. Fried will write the narrative for the PCN and recruiting requests. A biometrician, supervised by Bue, will plug into the CWT program from the outside. In addition, Sharr needs a research analyst to free up some of the biometrician's time to do more biometrician type things.

Florey wants a sign-in and sign-out system at the bunkhouse to assure that gear gets put away, old food gets thrown away, etc. It will be Evelyn, John and Sam's assignment to draft a bunkhouse/warehouse/yard policy for submittal to the regional staff.

APPENDIX A

PRINCE WILLIAM SOUND - COMMERCIAL FISHERIES
ANNUAL STAFF MEETING AGENDA
March 5 - March 7, 1991
ADF&G OFFICE ANCHORAGE, ALASKA

(8:30 a.m. Tuesday, March 5)

I. HERRING PROGRAMS

9:00 a.m.

A. Biomass Projection (Baker)

9:30 a.m.

B. Management Outlook (Brady/Donaldson)
   1. Outcome of Board Meeting
   2. Sac roe seine (Donaldson)
   3. Gill net fishery (Simpson)
   4. Wild Harvest roe-on-kelp (Simpson)
   5. Inseason Reporting (Haanpaa)

10:30 a.m.

C. AWL Sampling (Wilcock)

11:00 a.m.

D. Roe-on-Kelp in Pound Fishery (Morstad)
   1. Summary of 1990 results
   2. Board Meeting
      a. Proposal 377. Change in the Management Plan
      b. Proposal 142. Open vs. Closed
   3. Plans for 1991 natural spawning study
   4. Vessel contract
   5. Outboard needs

2:00 p.m.

E. Herring Spawn Deposition (Biggs/Baker)
   1. Summary of 1990 results
   2. Plans for 1991
   3. Personnel needs
   4. Vessel contracts
   5. Restoration projects

3:00 p.m. F. Aerial Surveys

G. Vessel Communications (Vansant)

II. REGIONAL REVIEW
   A. Comments from Headquarters (Clasby)
   B. FY-91 Pre Audit (Regional Staff)
   C. FY-92 Outlook (Regional/HQ Staff)

III. SUBSISTENCE ISSUES

A. Board Meeting - Subsistence proposals
1. Tatitlek herring
2. Chenega salmon
3. Copper River PU/Subsistence

IV. SALMON OIL SPILL PROJECTS

3:30 p.m.

A. Review 1990 Studies (Sharr)
1. CWT Project
2. Injury to eggs and Pre-emergent Fry
3. Injury to Spawning Areas
4. Aerial Surveys vs. Foot Surveys

B. 1. Regional Administration Review (Prigge)

C. 1. Salmon Oil Spill Modelling (Gates)

8:30 a.m. Wednesday March 6

B. Plans for 1991 Projects (Sharr)
1. CWT
2. Fry Dig
3. Ground Survey and Weirs
4. Montague Schedule

V. HATCHERY ISSUES

9:30 a.m.

A. RPT Activity Report (Brady)
1. Board Adoption of Management Plan
2. Remote release sites

10:30 a.m.

B. Annual Facility management plans (Simpson)
1. Solomon Gulch
2. Main Bay (F.R.E.D)
a. Sockeye Brood needs
3. P.W.S.A.C. Facilities

11:15 a.m. C. Tagging (Sharr)
1. Fry Release Program (J. Smith)

VI. SALMON FISHERY MANAGEMENT

1:00 p.m.

A. Annual Mgmt. Reports 1989 & 90 (Brady/Donaldson)

2:00 p.m.

B. Management Outlook
1. Forecast (Sharr)
2. Preseason Outlook Paper Status (Donaldson)
3. SHTF, Homeless Fishermen (Donaldson)

2:30 p.m.

C. Oil impact on Fishery

2:45 p.m.

D. Prince William Sound Salmon Fisheries
   1. Markers (Vansant/Simpson)
   2. Escapement Programs
      a. Coghill and Eshamy
      b. Aerial Surveys
      c. Ground Surveys
      d. PWS statistical area chart (Donaldson)

8:30 a.m. Thursday, March 7

E. Copper/Bering River
   1. Board Report (Morstad)
   2. Markers (Morstad)
   3. Forecast (Roberson)
      a. Chinook Forecast Techniques(Whitmore/Roberson)
   4. Chinook, Sockeye & Coho strategies (Morstad)
      a. Copper River
      b. Bering River
   5. Escapement (Morstad)
      a. Delta
      b. Bering River
      c. Upper Copper River Aerial Survey Funding
   6. Miles Lake
      a. Report on Sonar Meeting in Anchorage (Morstad)
      b. Personnel
      c. Truck Rental
   7. AWL Sampling (Sharr/Wilcock)
   8. Gulkana Hatchery Status Review (Roberson)
   9. Personal Use / Subsistence Fishery Status
   10. Coho Weir Project 1991 Plans (Morstad)

10:30 a.m.

VII. GENERAL DISCUSSION TOPICS

   1. Bunkhouse (Sharr/Wilcock)
   2. Network (Simpson)
   3. Catch Data Base (Simpson)
   4. Clerk III Fish Ticket Data Entry/Catch Reporting (Donaldson)
   5. Rockfish (Whitmore)
   6. Publications (Sheree)
   7. Sport Fish Comments

APPENDIX B

PRELIMINARY forecasted common propery harvest of salmon for Prince William Sound and the Copper and Bering River Districts, 1991.

	Harvest Point Estimate	Harvest Forecast Range	
		Lower	Upper
PINK SALMON			
Wild Stocks	6,110,000	1,360,000	19,190,000
Hatchery Stocks			
Solomon Gulch	3,150,000	0,000,000	10,220,000
Cannery Creek	8,530,000	0,000,000	18,150,000
Wallace H. Noerenberg	9,820,000	1,510,000	18,140,000
Armin F. Koernig	4,610,000	330,000	8,900,000
Total Wild + Hatchery(CPF)	**32,220,000**	3,200,000	74,600,000
HATCHERY SALES HARVESTS			
Solomon Gulch	2,670,000		
Cannery Creek	1,860,000		
Wallce H. Noerenberg	3,450,000		
Armin F. Koernig	1,630,000		
Total Sales Harvests	**9,610,000**		
TOTAL CPF + SALES	**41,830,000**		
CHUM SALMON			
Wild Stocks	279,500	59,400	669,800
Hatchery Stocks			
Solomon Gulch	23,300	000,000	59,800
W.H. Noerenberg (early)	1,190,200	206,400	2,173,900
W.H. Noerenberg (late)	65,600	000,000	138,500
Main Bay	397,300	97,800	696,800
Total Wild + Hatchery(CPF)	1,955,900	363,600	3,738,800
HATCHERY SALES HARVESTS			
Wallace H. Noerenberg	20,800		
Total Sales Harvests	**20,800**		
TOTAL CPF + SALES	**1,976,700**		

-CONTINUED-

PRELIMINARY forecasted common propery harvest of salmon for Prince William Sound and the Copper and Bering River Districts, 1991 (Continued).

	Harvest Point Estimate	Harvest Forecast Range	
		Lower	Upper
SOCKEYE SALMON			
Coghill	14,700	000,000	129,300
Main Bay Hatchery Stocks	163,100	145,800	180,400
Other PWS Stocks	86,500	13,700	159,400
PWS Wild + Hatchery	**264,300**	159,500	469,100
Copper River District			
Wild Stocks	746,800	657,100	836,700
Gulkana Hatchery Stocks	122,500	88,000	137,000
Copper River Wild + Hatchery	**869,300**	745,100	973,700
TOTAL SOCKEYE	**1,133,600**		
COHO SALMON			
Hatchery Stocks			
Solomon Gulch	45,100	25,300	64,900
Wallace H. Noerenberg	291,000	157,500	424,400
Other PWS Stocks	8,800	00,000	21,300
PWS Wild + Hatchery	**344,900**	182,800	510,600
Copper River District	291,600	124,300	415,400
Bering River District	120,300	000,000	224,900
Copper/Bering Totals	**411,900**	124,300	640,300
TOTAL COHO	**756,800**		
CHINOOK SALMON			
Copper River	41,500	31,100	51,900
TOTAL CHINOOK	**41,500**		

APPENDIX C

1991 SEASONAL HERRING REPORT

PRINCE WILLIAM SOUND HERRING

HERRING ANNOUNCEMENT NO.: DATE: TIME:

WEATHER: AIR TEMP: WATER TEMP: WIND:
GENERAL CONDITION:

LAST AERIAL SURVEY RESULTS:

BIOMASS DOCUMENTED TO DATE:

EFFORT: PROCESSORS REGISTERED: TENDERS ON GROUNDS:

HERRING HARVESTED: LAST OPENER TOTAL TO DATE
PURSE SEINE:
GILL NET:

ROE RECOVERY: LAST OPENER AVERAGE TO DATE
PURSE SEINE:
GILL NET:

TEST FISH, AVERAGE SIZE: WEIGHT LENGTH
PURSE SEINE:
GILL NET:

KELP FISHERY:
NUMBER OF DIVERS: POUNDS HARVESTED:

PRICES BEING PAID:
PURSE SEINE: GILLNET: KELP:

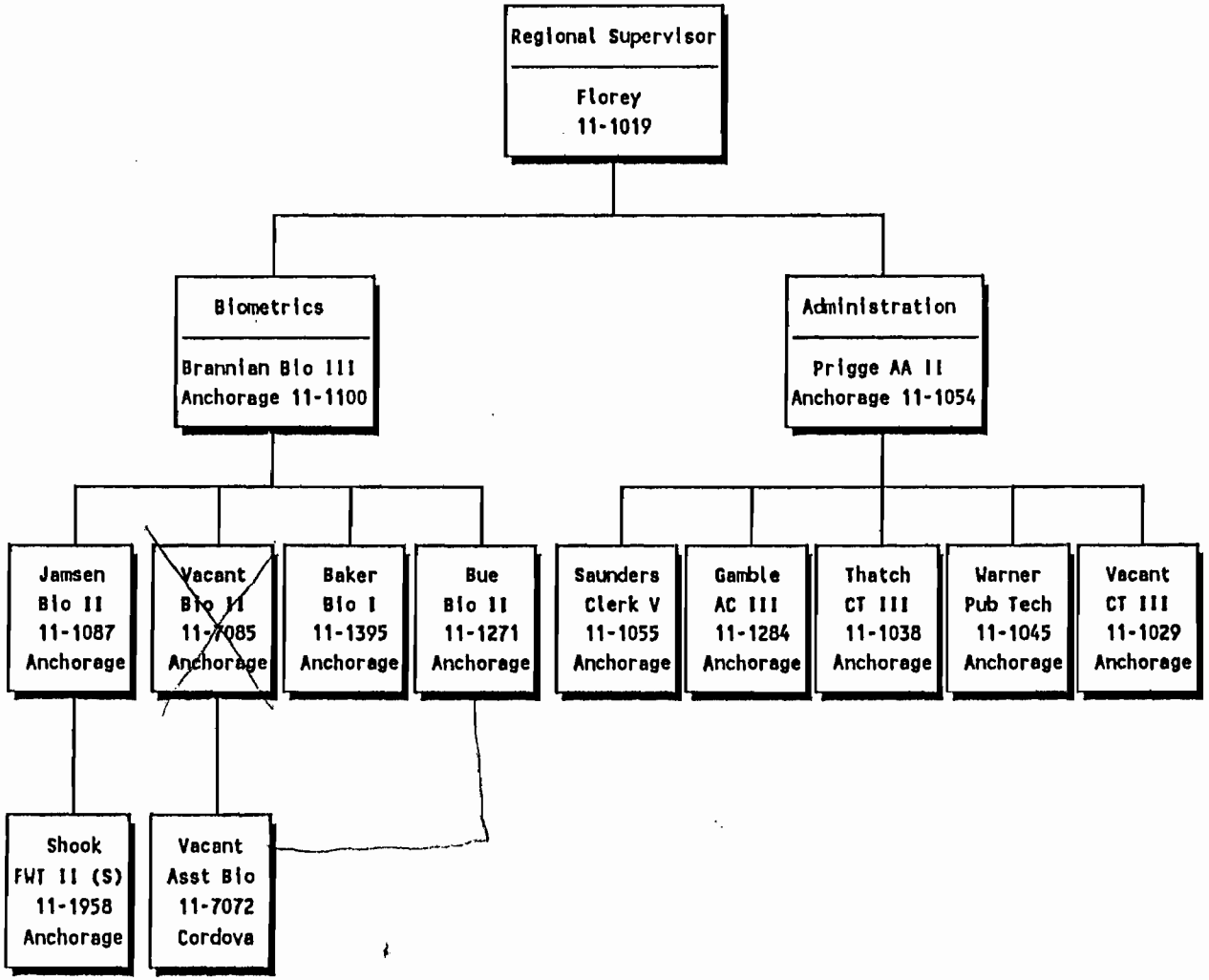
GENERAL OVERVIEW:

APPENDIX D

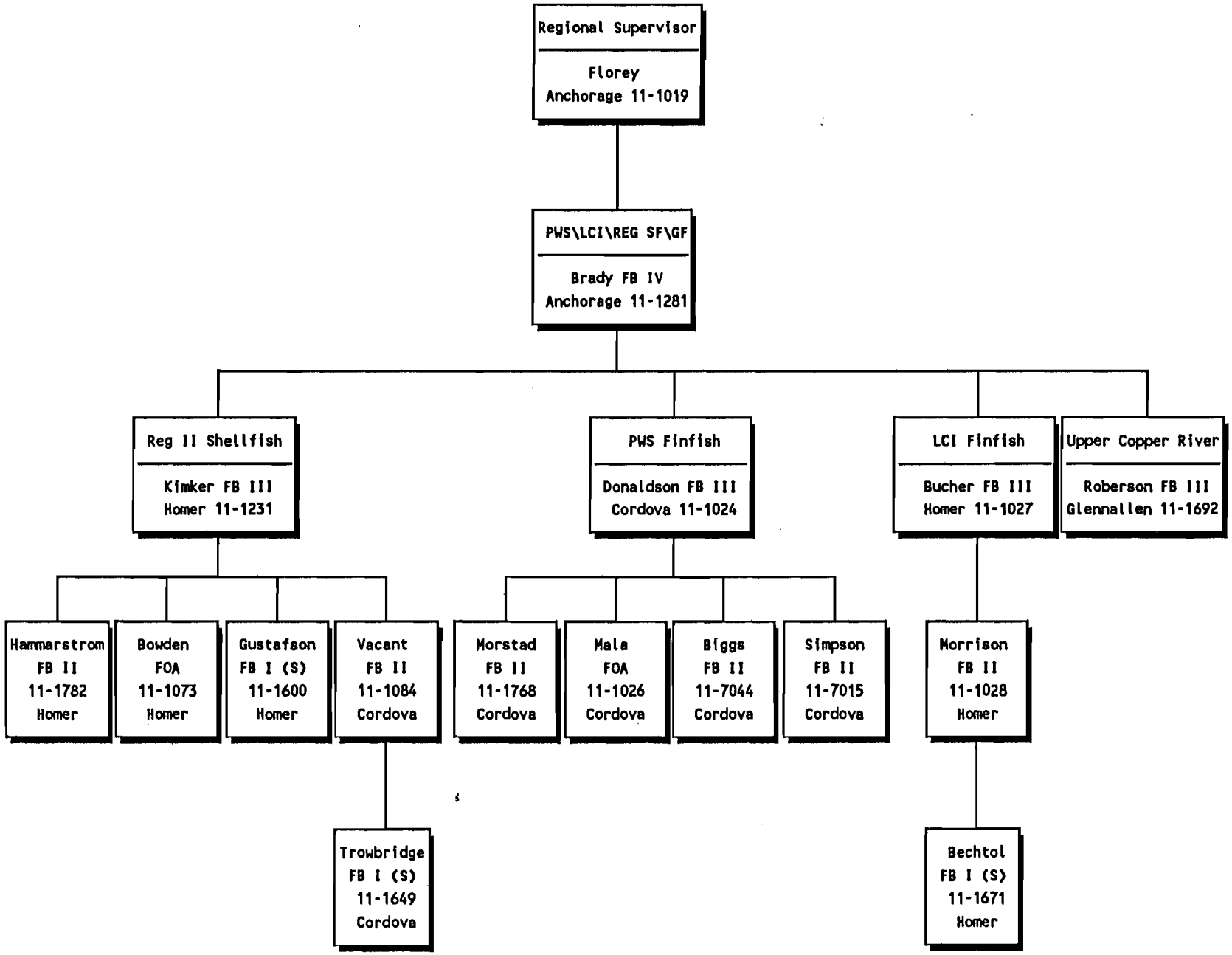
FY 91 Allocations (PWS)
Commercial Fisheries Division

March 5, 1991	100	200	300	400	500	Total
PWS Impact Salmon Spawning	170.5	2.0	145.3	25.0	40.0	382.8
Pink/Chum Pre-emerg Fry Smplng	91.7	4.0	145.0	10.0	18.8	269.5
PWS Salmon Cwtr Studies-Recovery	575.0	15.8	66.0	17.7	13.4	687.9
PWS Salmon Cwtr Studies-Biometrician	44.9	5.4	8.0	1.5	8.0	67.8
Assess/Impact PWS Herring	247.8	5.9	437.1	23.6	6.6	721.0
Assess/Impact PWS Spot Shrimp	29.6	1.4	15.0	4.6	0.0	50.6
PWS Clams	113.7	9.0	93.5	5.0	2.0	223.2
Administrative Overhead-CF	111.4	12.4	1.2	0.4	11.0	136.4
Database Management-CF	122.2	5.0	0.0	1.0	42.0	170.2
Life History Modeling-CF	108.9	3.0	60.0	1.0	10.0	182.9
TOTAL:	1,615.7	63.9	971.1	89.8	151.8	2,892.3

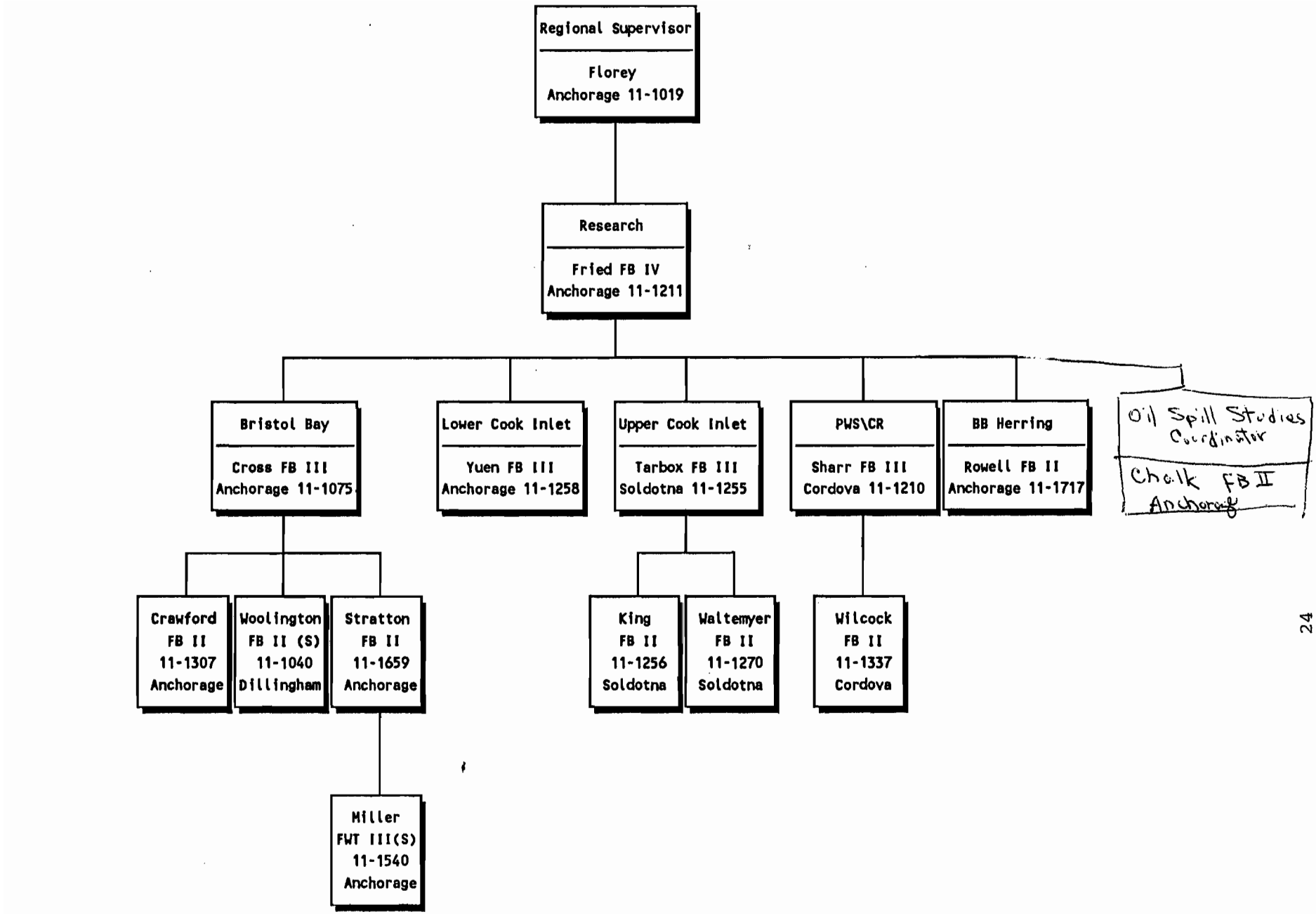
APPENDIX E



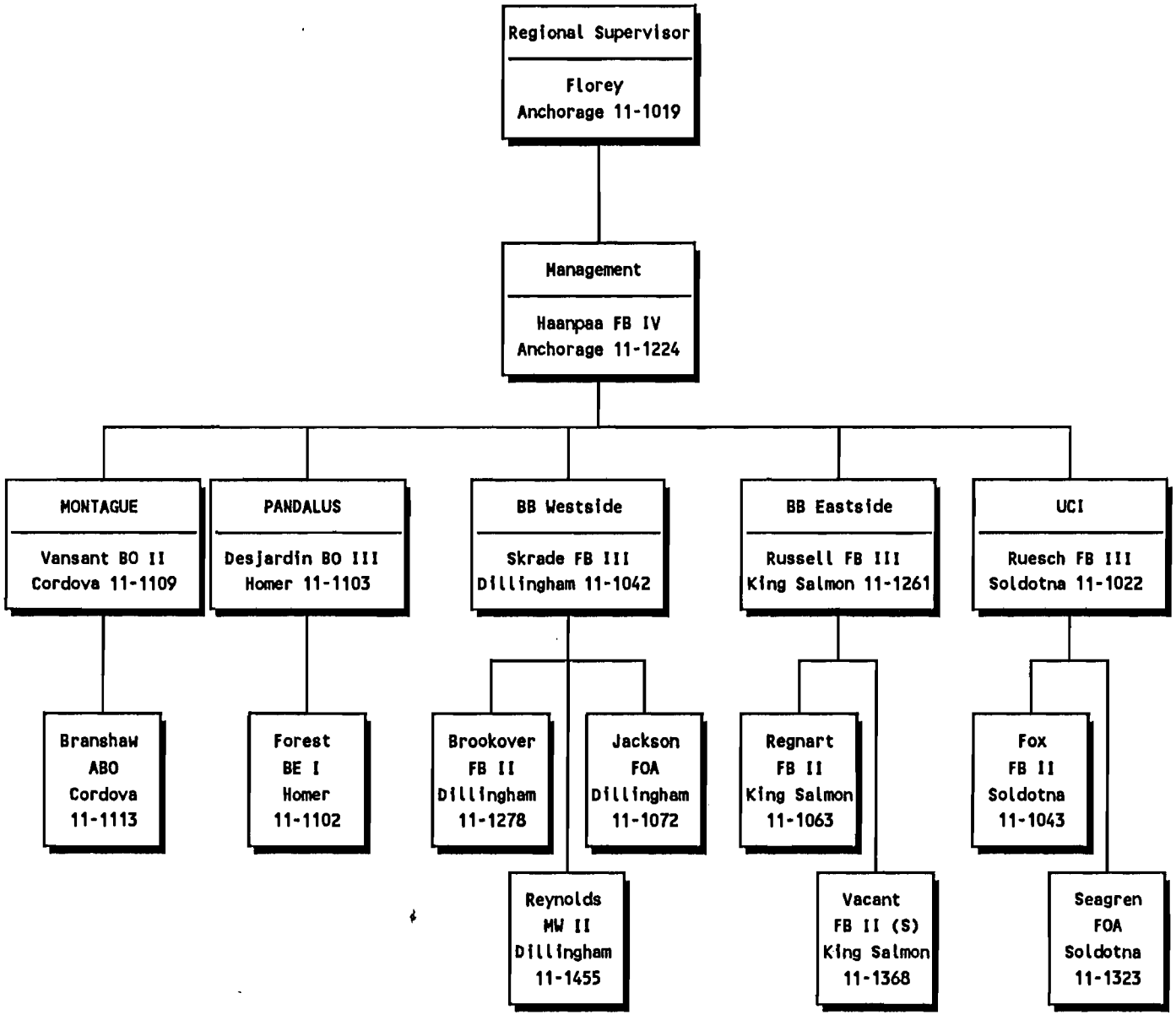
COMMERCIAL FISHERIES
REGION II
JANUARY 10, 1991



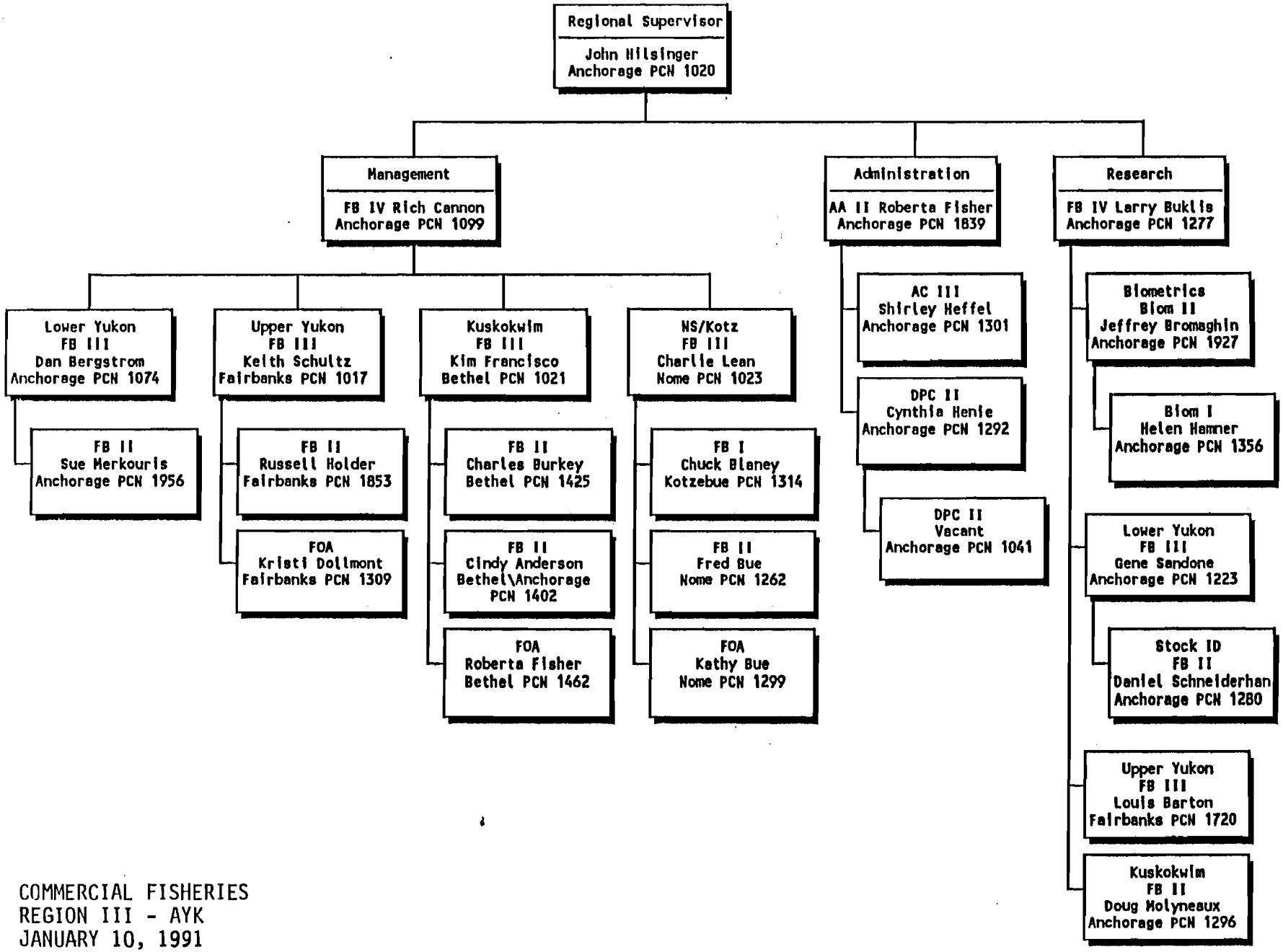
COMMERCIAL FISHERIES
REGION II
JANUARY 10, 1991



COMMERCIAL FISHERIES
REGION II
JANUARY 10, 1991



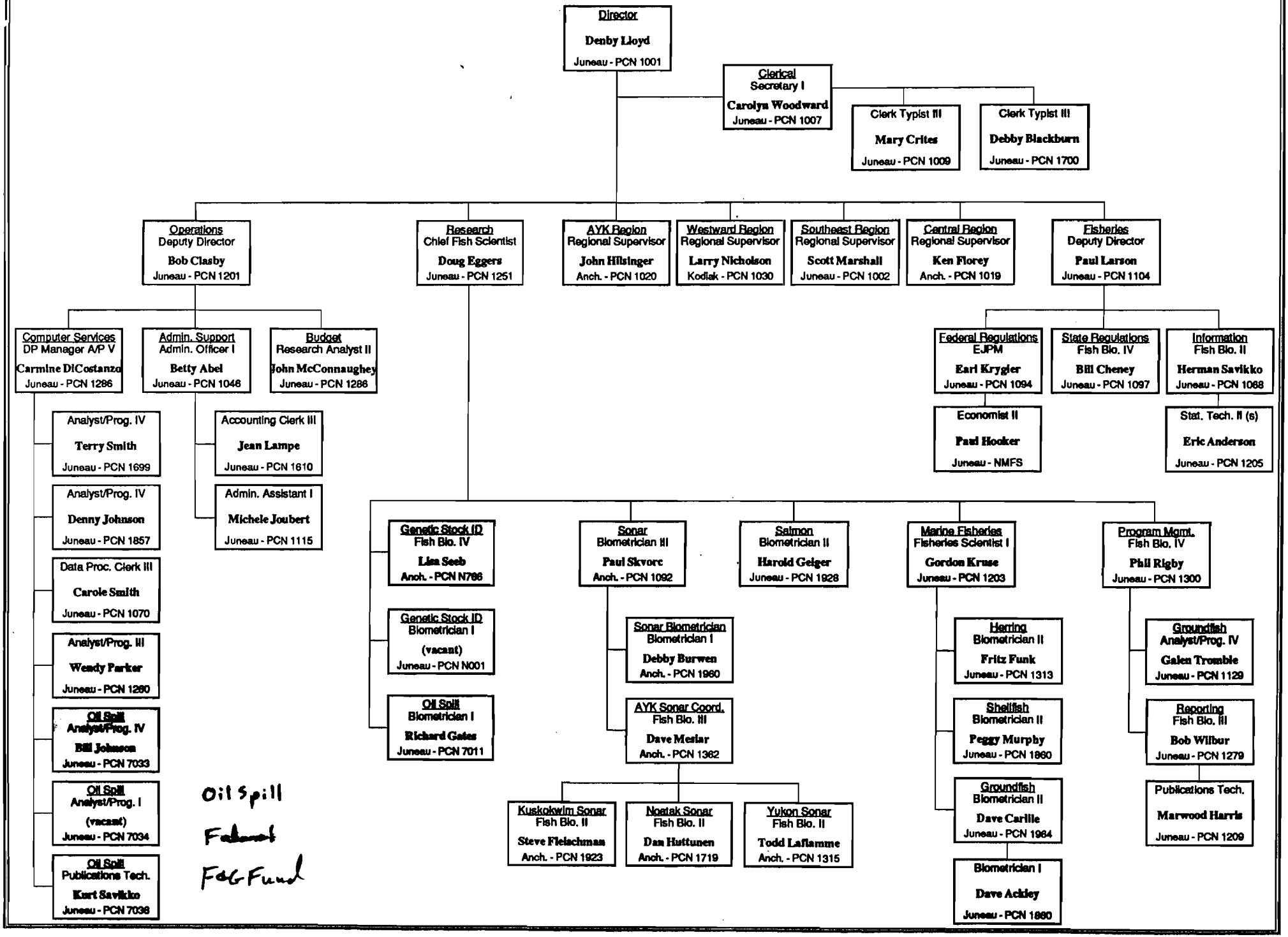
COMMERCIAL FISHERIES
REGION II
JANUARY 10, 1991



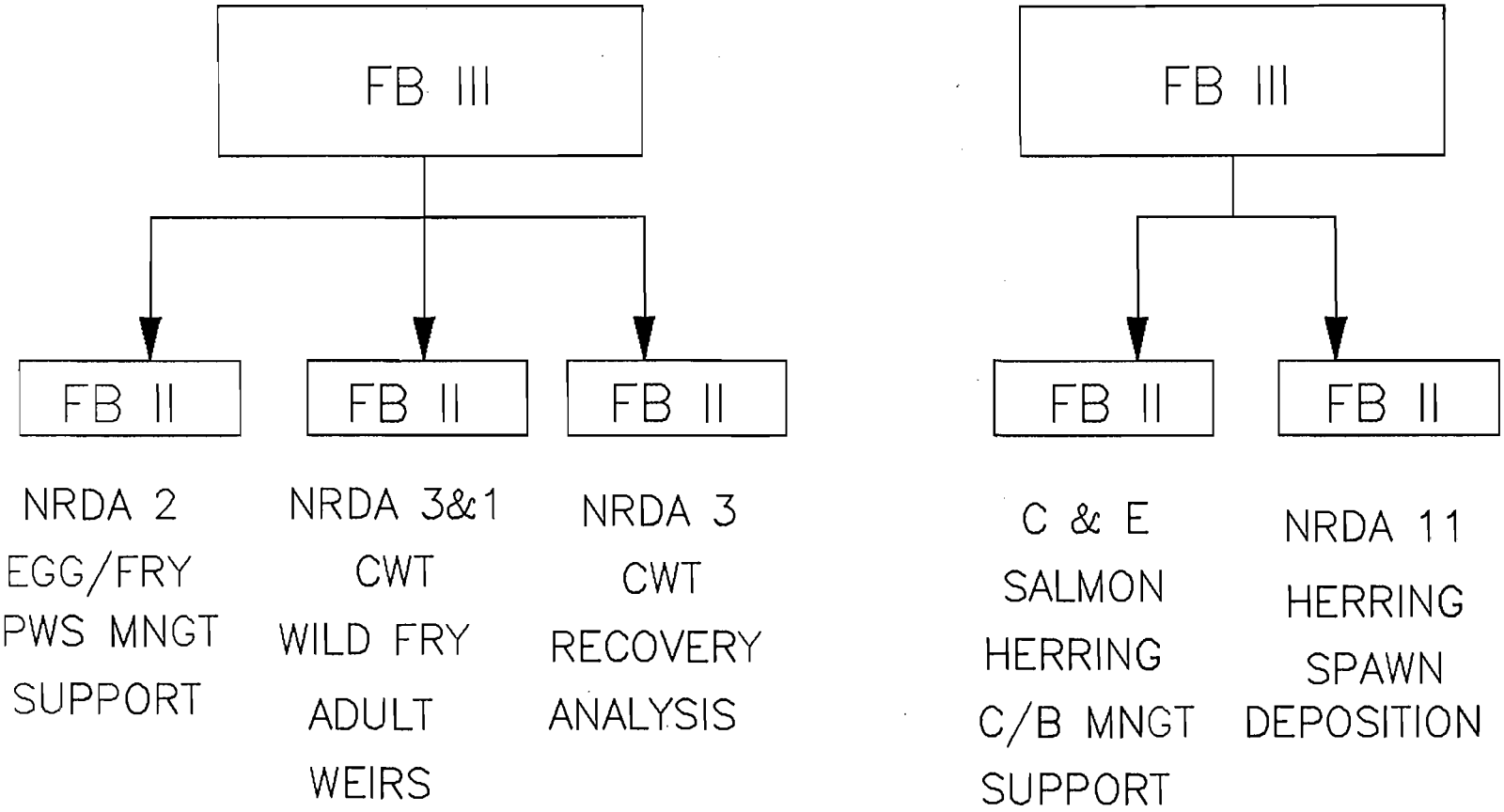
COMMERCIAL FISHERIES
REGION III - AYK
JANUARY 10, 1991

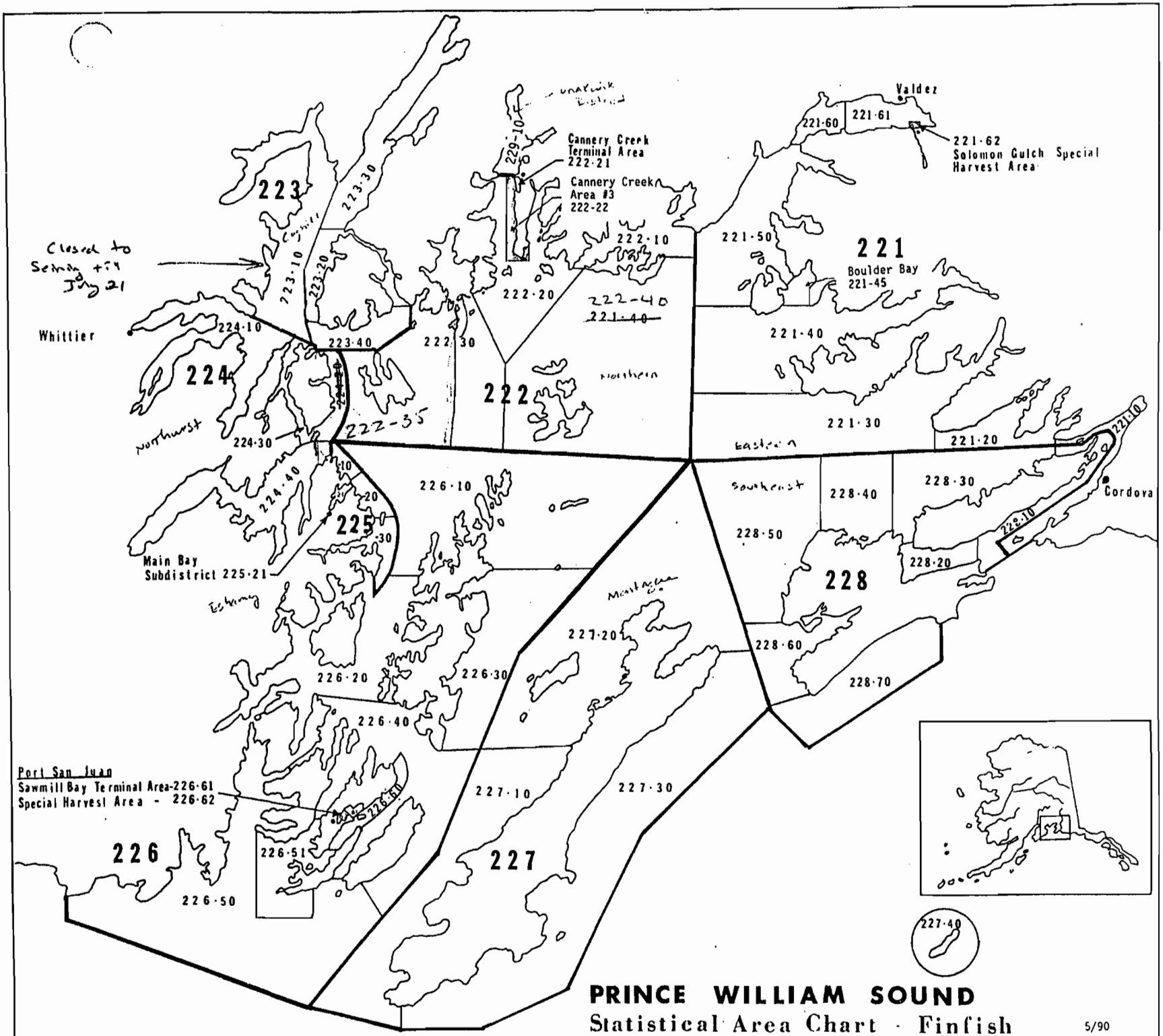
Division of Commen 'isheries—Headquarters

sed 2-11-91)



APPENDIX F


FB III
FB III
FB II
FB II
FB II
FB II
FB II
NRDA 2
EGG/FRY
PWS MNGT
SUPPORT
NRDA 3&1
CWT
WILD FRY
ADULT
WEIRS
NRDA 3
CWT
RECOVERY
ANALYSIS
C & E
SALMON
HERRING
C/B MNGT
SUPPORT
NRDA 11
HERRING
SPAWN
DEPOSITION


Valdez
221-60
221-61
221-62
Solomon Gulch Special Harvest Area
Cannery Creek Terminal Area 222-21
Cannery Creek Area #3 222-22
229-10
223
223-30
223-10
223-20
Closed to Seining July 21
Whittier
224-10
223-40
222-30
222-10
222-20
222-40
221-40
221-50
221
Boulder Bay 221-45
221-40
224
222
222-35
Northwest
Northern
224-30
221-30
Eastern
221-20
221-10
224-40
226-10
225
Southeast
228-40
228-30
Cordova
228-50
228-10
228-20
228
Main Bay Subdistrict 225-21
227-20
228-60
226-20
226-30
228-70
226-40
Port San Juan
Sawmill Bay Terminal Area-226-61
Special Harvest Area - 226-62
227-10
227-30
226
226-51
227
226-50
227-40
PRINCE WILLIAM SOUND
Statistical Area Chart - Finfish
5/90

APPENDIX G

APPENDIX H

1990

01/28/91

COPPER RIVER PERMIT SUMMARY
Number of Fish by Permit Type

		Number Permits	Reds	Kings	Cohos	Steelhd	Other	TOTAL
** PU								
INDIVIDUAL	DIPNET	951	5262	298	125	1	30	5716
FAMILY	DIPNET	4680	57795	2285	1321	22	102	61525
INDIVIDUAL	FISHWHEEL	7	64	1	0	0	0	65
FAMILY	FISHWHEEL	51	672	10	0	0	0	682
** Subtotal **		5689	63793	2594	1446	23	132	67988
** SUB								
INDIVIDUAL	DIPNET	25	642	4	24	0	0	670
FAMILY	DIPNET	70	1974	36	20	0	3	2033
INDIVIDUAL	FISHWHEEL	62	4737	81	0	0	0	4818
FAMILY	FISHWHEEL	249	22594	483	43	0	4	23124
** Subtotal **		406	29947	604	87	0	7	30645
*** Total ***		6095	93740	3198	1533	23	139	98633

295 not returned

269 Personal use

26 subsistence

APPENDIX I

FISH/SHELLFISH STUDY NUMBER 30

Study Title: Data Base Management

Lead Agency: ADF&G

INTRODUCTION

Large quantities of data are being analyzed in order to demonstrate the fact and extent of injury to natural resources due to oiling. The purpose of this study is to make original data readily available to agency and non-agency personnel so that data analysis can be conducted, and so that all analyses can be accomplished in an efficient and cost effective manner. The data to be placed under the database management system (DBMS) will be drawn from two categories; 1) historical data necessary to the interpretation and implementation of the results of NRDA studies, and 2) data resulting from NRDA studies.

OBJECTIVES

A. To construct a cost effective DBMS to readily retrieve and order data from original data in electronic form according to user specified criteria of time, space, and selection of variables. The DBMS should be constructed to meet the following criteria, in order of priority: 1) completeness of contents, 2) speed of retrieval, and 3) ease of use in assembling primary data into data sets for further analysis by other software. Furthermore, the DBMS will take advantage of existing DBMS applications currently available in the ADF&G.

B. To develop the structural facilities for individuals to access data that is physically located at different sites. To accomplish this, a LAN (local area network) facility must be developed in the Cordova and Anchorage ADF&G offices, as well as to develop a system for linking these with existing LAN's in Juneau and Kodiak. Note that objective B, although a necessity for this project, will be met by a concurrent and separately funded project "statewide data base system" currently being implemented by ADF&G.

METHODS

A distributional data base management system, using SQL software, will be developed. The system will be flexible to accommodate the data physically located in Kodiak, Anchorage, Cordova, and Juneau.

The DBMS system will be accessed through a linked system of LAN's, (Juneau, Anchorage, Kodiak, and Cordova). The DBMS can be accessed by any user with an IBM compatible PC that has access to the Anchorage LAN. Interface software using "WINDOWS" will be

developed and made available to individuals to facilitate non-programmer access to the DBMS systems.

The following data, for all species and from Prince William Sound, Cook Inlet, Kodiak, and Chignik areas, will be incorporated into the DBMS:

1. All NRDA project data.
2. Salmon escapement data, including weir counts, stream counts, aerial survey counts, and sonar counts.
3. Biological data including age composition, size, sex, growth, and stock composition.
4. Pre-emergent and egg density.
5. Groundfish and shellfish survey data.

In addition, the DBMS will have access to statewide fish ticket system data which includes commercial fisheries catch and effort data by area, species, and gear type.

This project will be developed concurrently with the development of the ADF&G statewide data base system which is being funded with State of Alaska general funds. It is the intent to develop LANS in the Anchorage and Cordova ADF&G offices. These new LAN's will be linked with existing Kodiak and Juneau LAN's to facilitate statewide access to the above DBMS as well as to accommodate the need to access data, currently in electronic form, located in Kodiak and Juneau. For example the catch data cited above is currently in the statewide fish ticket system data base which resides in Juneau. The network will accommodate all Commercial Fisheries Division personnel and have the potential capacity to be expanded to all departmental personnel.

BUDGET: ADF&G

Personnel Services	$ 80.0
Travel	5.0
Contractual	0.0
Supplies	1.0
Equipment	34.0
Total	$120.0