

LOWER COOK INLET ROCKFISH: SUBSISTENCE HARVESTS AND LOCAL KNOWLEDGE

RC 20

November 16, 2010

Davin Holen
Division of Subsistence
Alaska Department of Fish and Game



Division of Subsistence
Alaska Department of Fish and Game
1255 W. 8th Street
PO Box 115526
Juneau, Alaska 99811-5526
www.adfg.state.ak.us

RC 20



DIVISION OF SUBSISTENCE

Purpose of the Presentation

1. To provide information regarding the incidental harvest of rockfish in lower Cook Inlet in the Subsistence Halibut Fishery. Based on recommendations in #2001-206-FB.
2. To provide background related to Proposal 51 as it might concern subsistence users and to review the subsistence harvest of rockfish in two Lower Cook Inlet communities.



ALASKA ROCKFISH

- Over 30 species of rockfish inhabit the waters of the Gulf of Alaska.
- Many species tend to be sedentary and therefore subject to local depletions.
- Many species are long-lived and some can reach ages of over 100 years.
- Rockfish have been used for subsistence purposes in Alaska for centuries.

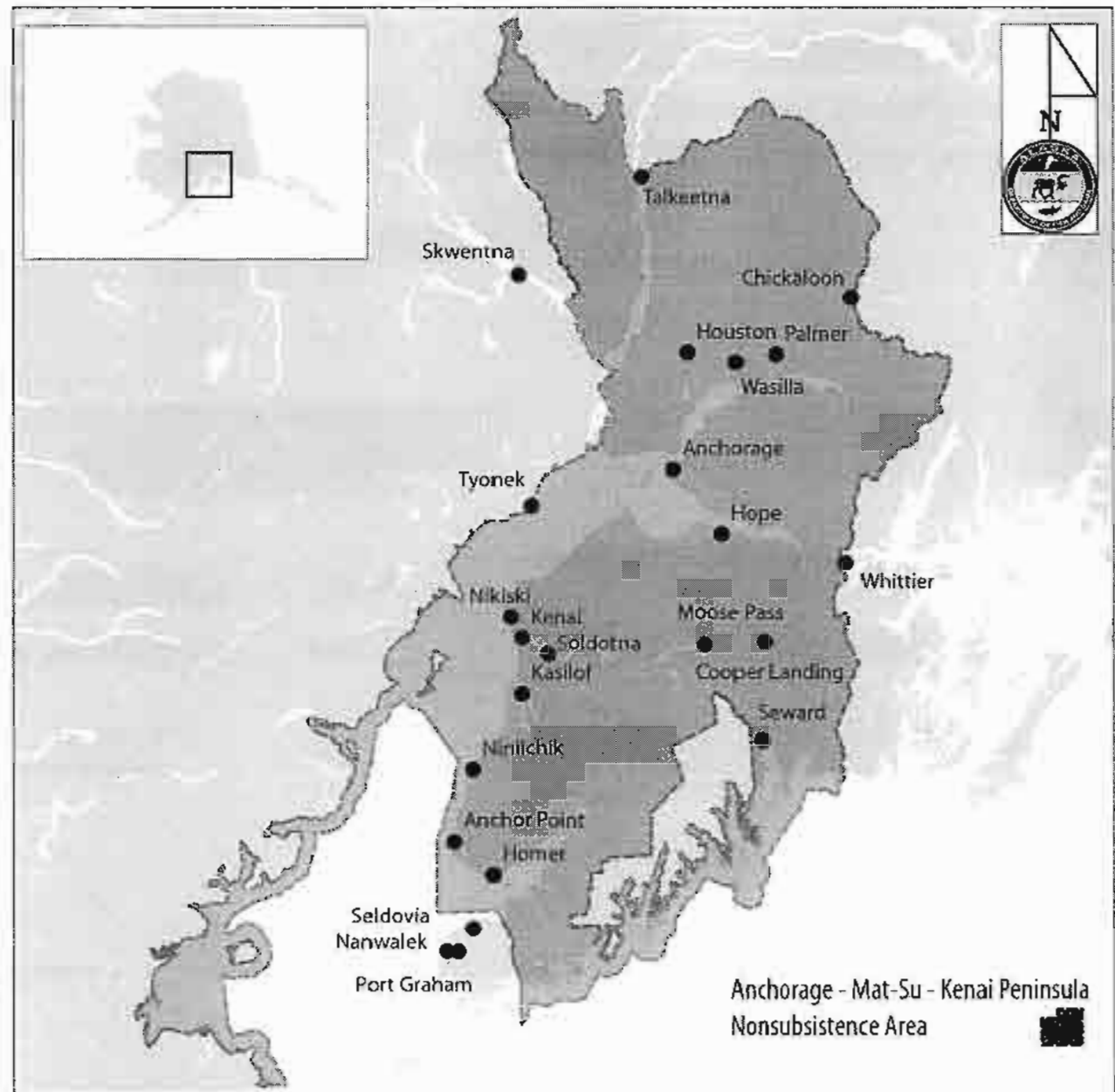
Yelloweye Rockfish (*Sebastes ruberrimus*)
in Chenega Bay

Photograph Courtesy of McLaughlin Environmental
Services, Chenega Bay



C & T Finding - Rockfish

- 5 AAC 01.566.
Positive C & T
finding for Cook
Inlet (outside non-
subsistence area).
- Amount reasonably
necessary for
subsistence: 750 –
1,350 rockfish.



DIVISION RESEARCH

- Alaska Statute 16.05.094: Seven duties.
- Research customary and traditional uses of Alaska's fish and wildlife resources:
 - Specifically, to provide information to the Board of Fisheries and Board of Game for their use in evaluating reasonable opportunity for customary and traditional uses.
- Social science methods:
 - Conducts research directly with people.
 - Focus is on subsistence **users** and subsistence **uses**.



SOURCE OF LCI ROCKFISH INFORMATION

Alaska Department of Fish and Game Division of
Subsistence Technical Paper No. 337:

*"Subsistence harvests and local knowledge of
rockfish Sebastes in four Alaskan communities"*

Research project with the North Pacific Research Board



North Pacific Research Board
1007 West 3rd Avenue, Suite 100
Anchorage, AK 99501
www.nprb.org



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PROJECT COMMUNITIES



PRESENTATION FOCUS:

Nanwalek and Port Graham



PROJECT QUESTIONS

- Local fishers' observations about rockfish populations and trends;
- Species composition of contemporary subsistence rockfish harvests.
 - Data were collected at the level of "rockfish," "red rockfish," and "black rockfish," not at individual species level.



SOURCES OF DATA/METHODS

- Division of Subsistence
 - Household survey data from 1985 to 2003 (CSIS).
 - Supplemental rockfish survey to SHARC holders.
 - In-person key respondent interviews.
 - Participant observation.
- Division of Subsistence/NMFS
 - Annual postal surveys administered to all SHARC card holders.



FINDINGS

General Local Observations and Strategies

- The two rockfish species most-often caught are yelloweye rockfish (*S. ruberrimus*) and black rockfish (*S. melanops*).
- Both species are referred to as **tu kuq** in Alutiiq.
- Rougheye rockfish (*S. aleutianus*) and yellowmouth rockfish (*S. reedi*) are both referred to as **tilpuuk** in Alutiiq.



Alutiiq fishers and hunters,
Kachemak Bay 18th Century



FINDINGS

Respondent Observations about Black Rockfish

- Most commonly-caught rockfish.
- Found near kelp beds and move with the tide.
- Spawn in Port Graham Bay.
- Nanwalek respondent – abundance is high, population not changed.
- Port Graham respondent – abundance is not as high as 10 or 20 years ago.



Estimated subsistence harvests of rockfish, by number of fish, from Division of Subsistence CSIS, study communities, 1985-2003

Year	Nanwalek	Port Graham	Total
1987	485	235	720
1989	149	325	474
1990	82	385	467
1991	184	526	710
1992	129	203	332
1993	102	172	274
1997	189	153	342
2003	991	236	1227
Average	289	279	568



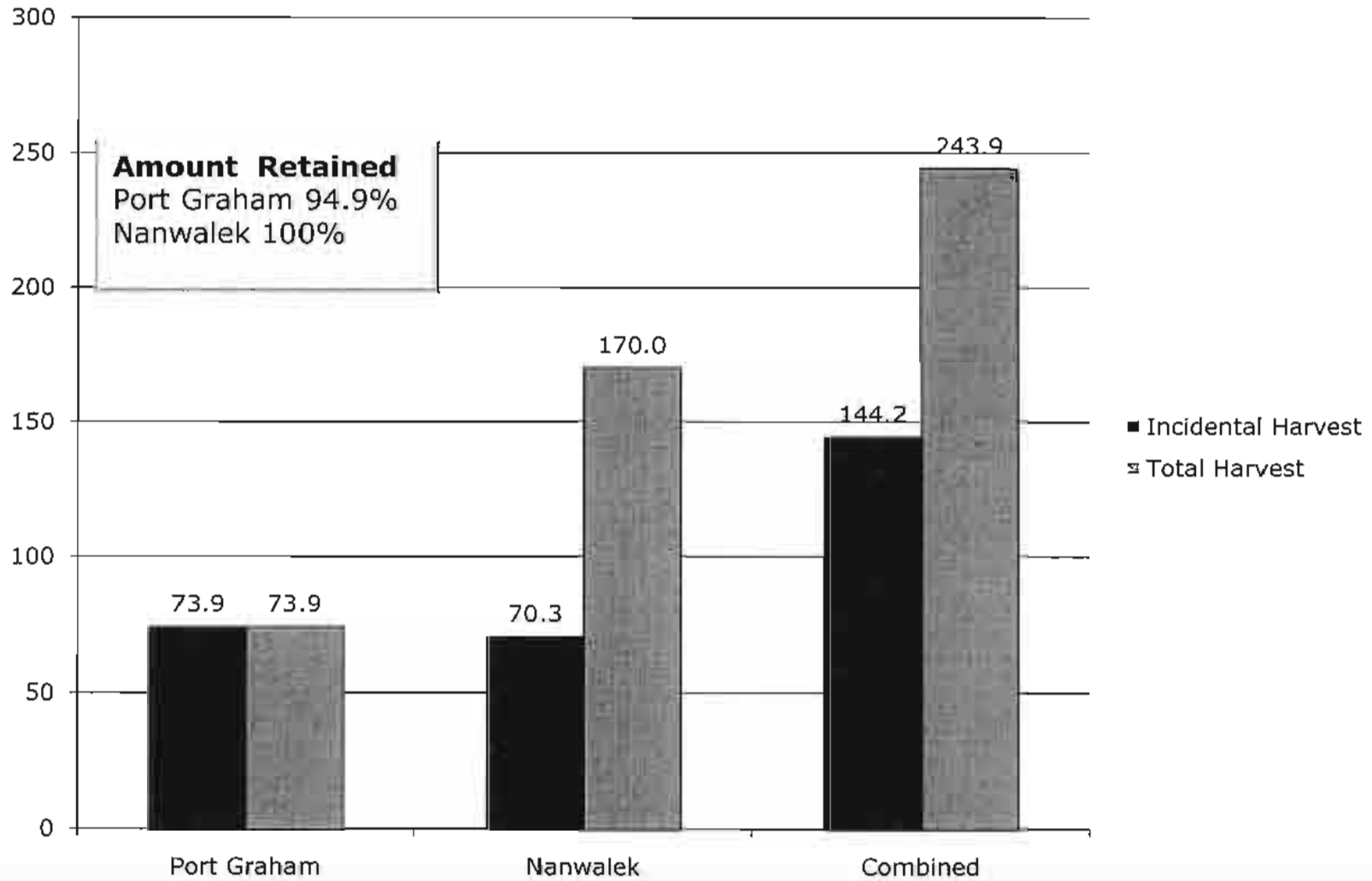
FINDINGS

Avoiding Incidental Harvest/Overharvest

- Halibut are usually the targeted species, not rockfish.
- Local traditional knowledge and modern fish finders ensure fishers bypass rockfish habitat.
 - Rockfish are found in rocky areas.
 - Halibut are found on sandy ocean floors.
- Incidental rockfish harvests are retained.



Incidental harvest of rockfish in Nanwalek and Port Graham, while fishing for halibut in 2006



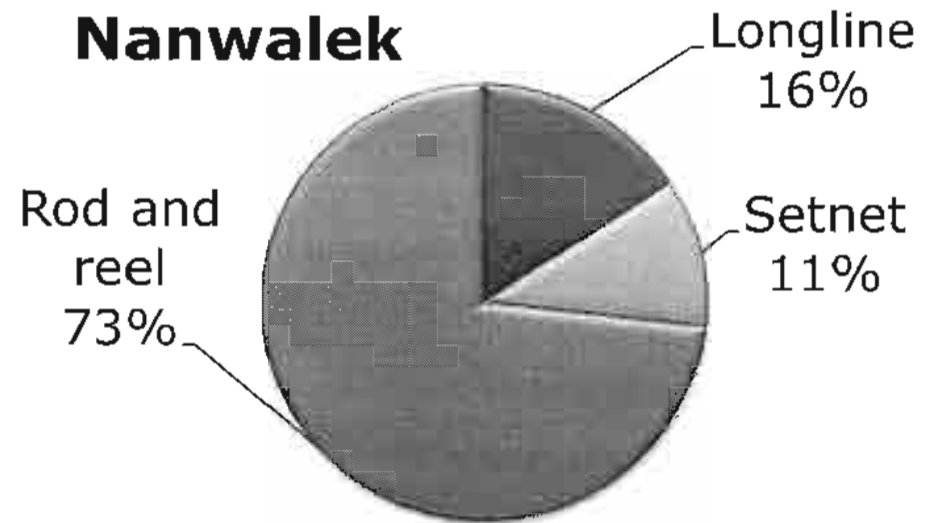
Incidental harvest of rockfish in the two project communities as reported by SHARC holders 2003-2006

	2003	2004	2005	2006
Port Graham	181	132	2	74
Nanwalek	330	124	230	70
Total	511	256	232	144

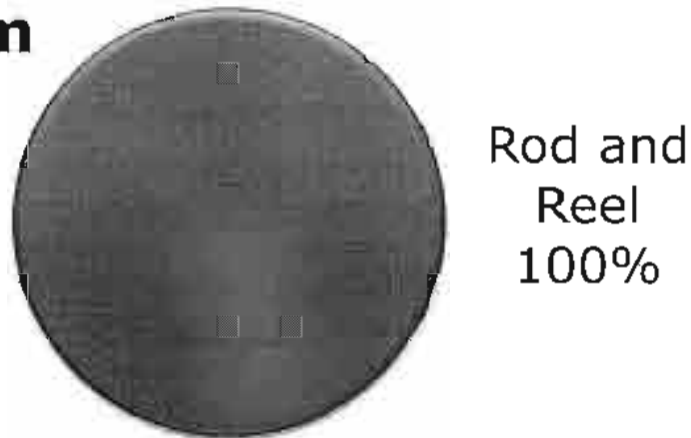


Gear types

Nanwalek



Port Graham

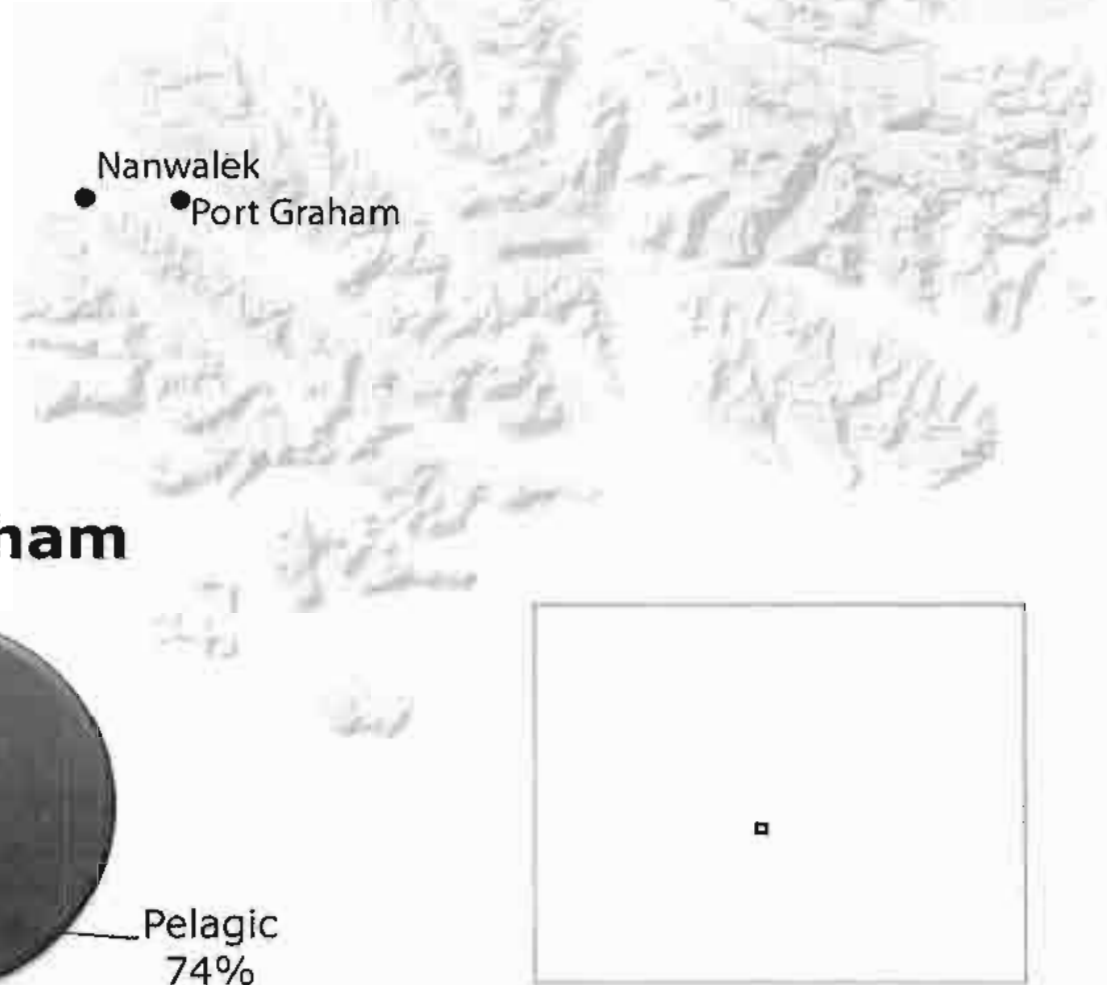


Species of rockfish harvested

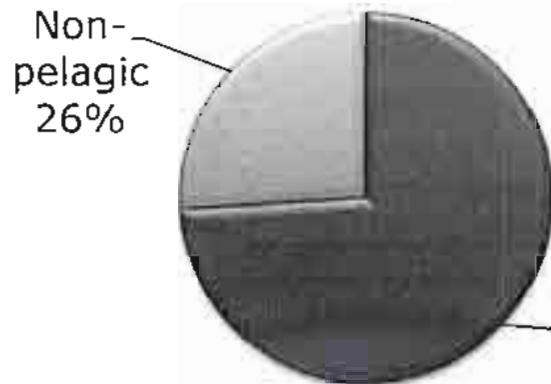
Nanwalek



Pelagic
100%



Port Graham



Non-
pelagic
26%

Pelagic
74%

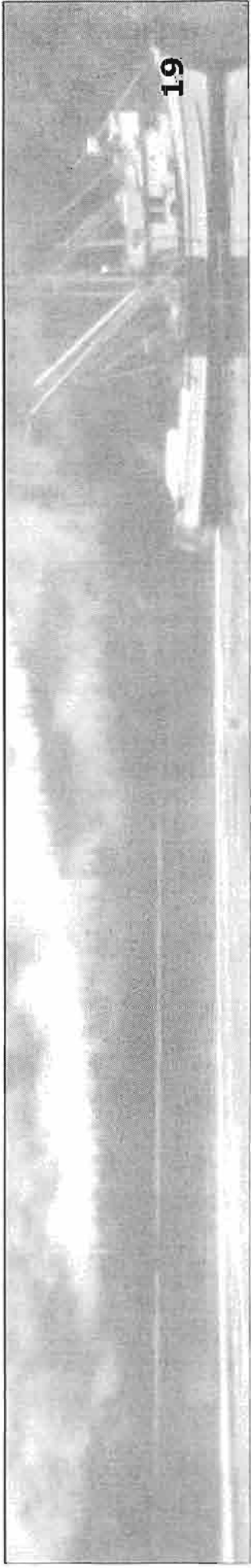


PROJECT CONCLUSIONS

1. Respondents demonstrated in-depth local knowledge about rockfish habitat.
2. Respondents use their local knowledge and modern technology to avoid incidentally catching rockfish while fishing for halibut.
3. Nanwalek and Port Graham respondents mainly harvest rockfish incidentally.
4. The incidental harvest of rockfish is small and most are retained.
5. Community location is key in the diversity of pelagic and non-pelagic rockfish harvests.



Questions?



Estimated Trail Lakes Hatchery Production 2000 to 2010

Year	Leisure/Hazel	Kirschner	Tutka**	Paint	Bruin	Ursus	Grouse	Res. Bay Reds	Big	Hidden	Tustumena	Packers	Total Sockeye Production
2010*	1,036	8,919	43,758					34,923	120,000	50,000			258,636
2009	5,835	19,121	15,154					155,760	43,277	18,703			257,850
2008	70,321	14,762	20,104					104,647	18,079	24,000			251,913
2007	112,439	37,444						32,820	36,014	32,720	334,200		585,637
2006	104,995	50,538						64,264	24,050	32,190	379,000		655,037
2005	67,934	14,969						70,589	17,894	37,231	126,121		334,738
2004	84,710	16,798						28,568	271	35,342	167,705		333,394
2003***	100,000	50,348						23,328	88,849	22,300	99,648		384,473
2002	156,071	32,492						28,716	85,946	151,741	69,532		524,498
2001	132,515	38,938					11,276	17,833	47,164	100,887	79,156		427,769
2000	102,906	31,627		30	40	100	45,350	32,498	28,009	74,312	57,707	31,214	403,793

* Preliminary Data - does not include all harvest data.

** Does not include sport and set gill net harvests

*** CIAA believes some of the fish harvested in the Leisure/Hazel harvest area (432,998) were not from Leisure/Hazel Lakes and are not included in the return total

10/21

Gary Fancher

VOTER RECORD/COMMENT

ADVISORY COMMITTEE: Central Peninsula

RC 22

DATE: Oct. 25 2010 PAGE 1 OF 12

Board of Fish Comments for Lower CI Fish.

Please use this format to record the votes and comments of members regarding proposals. The boards are particularly interested in hearing the reasons why proposals are supported/opposed. If committee members believe a proposal does not pertain to their jurisdiction, it is not necessary to spend time on that proposal.

Proposal				Summary of Discussion
#	Support	Oppose	Abstain	(include minority view)
# 1	9	0	0	House Keeping! This does not change any long term practice, but uses GPS technology to make it legal.
# 2	0	9	0	Failed! Should leave openings as they currently are. Dept. still has to EO. ^{weekly} periods. Dept. should be funded adequately to manage for MSY and on abundance.
# 3	0	9	0	Same as #3 Failed!
# 4	5	4	0	Passed! Those in favor thought it should be amended to be in compliance with The Magnuson - Stevens Fishery Conservation and Management Act and the federal EEZ designation. Those against thought it should be left as it currently is. Gear group conflict would arise.
# 5	5	4	0	Passed! Same justification as #4 with the addition that the drift fleet historically fished Resurrection Bay prior to 1971 and was excluded for allocation reasons.

VOTER RECORD/COMMENT

ADVISORY COMMITTEE: Central Peninsula

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Board of Fish Comments for Lower CI Fish

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Proposal #	Support	Oppose	Abstain	Summary of Discussion (include minority view)
#6	0	8	1	Failed: This would result in CIAA not recouping the cost of the Kirschner Lake stocking program and the program would be terminated thus benefiting no one. Leave the terminal harvest area as is currently. After the cost recovery goal is met the remaining sockeye are available for common property harvest. Brim Bay gills & Chum can and are harvested outside the Kirschner terminal harvest area. Some years there is very little effort on these stocks. The one abstained didn't understand the issue & didn't want to voice an opinion.
#7	5	4	0	Passed: Same justifications as #4
#8	8	10	0	Passed: This would return the historic gillnet fishery to Resurrection Bay that was closed for allocation reasoning. Abstained had no opinion wanted to leave as is now.
#9	9	0	0	Passed: House keeping; it would not change current markers but would put the proper latitude and longitude to where they are.

VOTER RECORD/COMMENT

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Board of Fish Comments for Liver C.I. Flitich

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Proposal #	Support	Oppose	Abstain	Summary of Discussion
				(include minority view)
#10	0	9	0	Failed: This should not be a regulation closure but should remain an E.O. closure if it needs to be closed for conservation reasons. There are harvestable surpluses of salmon in this area that should allow a commercial harvest but has been kept closed for allocative reasons.
#11	9	0	0	Housekeeping: Passed: Specifically defines the boundaries.
#12	9	0	0	Passed unanimously: CIAA needs the current plan to be permanent so they can have the stability of an appropriate expectation of achieving cost recovery and egg take goals. Without this stability CIAA operations and stocking projects are in jeopardy of failure and closure. This would result in a ^{potential} loss of 250,000 to 275,000 sockeye and one to two million pinks to the common property fisheries. (Commercial sport, PH, and guide). All other CIAA activities, habitat work, beaver dam clearance, flow control structures, fry smolt and adult counts, data & limnology collection would be terminated. The public & communities would suffer needlessly.

VOTER RECORD/COMMENT

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Board of Fish Comments for Lower CI Fin Fish

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Proposal #	Proposal			Summary of Discussion (include minority view)
	Support	Oppose	Abstain	
#13	9	0	0	Passed unanimously. Same justification as #12. We agree with the problems and solutions stated in the issue and what will happen if nothing is done. The Department will not close the sport/PA fishery unless the BOF directs them to. It is It is only fair to share the conservation burden to achieve the escapement and egg take goals. To continue the enhancement projects is more beneficial to the public than to jeopardize their termination for short term greed.
#14	9	0	0	Passed unanimously. See #13 comments. We agree with this proposal that includes all of CIAA enhancement projects. If the projects can't be paid for then they will be terminated benefitting no one.
#15	7	2	0	Passed! Those in favor didn't see a problem with using cast nets. Those oppose felt there was adequate opportunity to catch herring under the current legal gear and a new legal gear was not needed.

VOTER RECORD/COMMENT

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Board of Fish Comments for Lower CI Finfish

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Proposal #	Support	Oppose	Abstain	Summary of Discussion (include minority view)
#16	9	0	0	Housekeeping Passed!
#17	9	0	0	Passed! Housekeeping. No body doing it now.
#18	NO	ACTION		This proposal is full of errors. IT is confusing and contradictory as to what is being asked for what areas.
#19	0	9	0	Failed! Leave as is. Any jig quota not used now is reallocated to both gear types on Sept. 1st. Passing this proposal would eliminate any growth in the jig fishery and discourage new participants.
#20	0	9	0	Failed! The coho stocks are healthy with no conservation concerns. This is strictly allocative. No need. Could go to single hook barbless to reduce mortality from hook & release.
#21	0	9	0	Failed! Leave under the current bag limit. There are no conservation concerns in Silver Salmon Creek or Shelter Creek or any other west side streams. Current bag limit working.

VOTER RECORD/COMMENT

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Board of Fish Comments for Lower CI Finfish.

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Proposal #	Proposal			Summary of Discussion (include minority view)
	Support	Oppose	Abstain	
#23	1	8	0	Failed! Leave as is: See comments to #22. The one in support said there are no conservation concerns and he would like to catch 3 coho per day.
#24	9	0	0	Passed! Every system must be managed with a PEG for MSY.
#25	0	9	0	Failed! Each system is different and should be managed separately.
#26	9	0	0	Passed! These rivers are getting abused and returns are decreasing. We agree with the issue statement pointing out the increase mortality.
#27	NO ACTION			See #26
#28	9	0	0	Passed! The returns are decreasing steadily. ADFG says this reduction is not necessary because the current bag limit is sustainable and they can EO reduced bag limits. We think it should be the other way around reduce annual limit to two to be conservative and insure escapement is met, and EO a more liberal limit if runs are strong.

VOTER RECORD/COMMENT

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Board of Fish Comments for Lower CI Fly fish.

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Proposal #	Proposed			Summary of Discussion (include minority view)
	Support	Oppose	Abstain	
#29	NO	ACTION		See #28
#30	NO	ACTION		See #28
#31	6	3	0	Passed! Hook & release under the current regs is causing high mortality on kings, silver and Steelhead. This is increasing as the runs are depleting. Those opposed felt there was is enough restriction to protect Steelhead and would like to keep a steelhead to eat as they historically have. Stop playing with fish by catch & release.
#32	NO	ACTION		See #31
#33	NO	ACTION		See #31
#34	NO	ACTION		See #31
#35	NO	ACTION		See #31
#36	8	1	0	Passed! This is worth a try to prevent high mortality from catch & release and snagging by lining. The sports fishermen present said circle hooks work in this prevention. People are snagging at an alarming rate because there is little to no enforcement.

Continue →

VOTER RECORD/COMMENT

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Board of Fish Comments for Lower C-I Flatfish

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Proposal #	Summary of Discussion			
	Support	Oppose	Abstain	
#36	continued			There is gross abusive snagging. The one opposed didn't think it was necessary.
#37	0	9	0	Failed! We agree with the Dept. to leave under the current 300 ft. closure. The Dept can and has EOD a larger closed area.
#38	5	4	0	Passed! Those in favor said this closure would help reduce the mortality of winter caught Steelhead. Those opposed said there is very little fishing in the winter because of ice and should resist closure where possible to allow opportunity even if light.
#39	NO ACTION			See #38
#40	3	6	0	Failed! This is similar to #38 but included closing N'Whitkit & Starbuck Rivers which those opposed didn't want closed. Those in favor said this would help reduce the mortality of winter caught Steelhead.

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Board of Fish Comments for Lower CI Fish.

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Proposal #	Support	Oppose	Abstain	Summary of Discussion (include minority view)
#41	9	0	0	Passed: There is increased guiding that is increasing the catch & mortality from Eitch and release. The king returns are poor and declining. We should be conservative and slow down the abuse.
#42	9	0	0	Passed & same justification as #41
#43	9	0	0	Passed: This wouldn't increase harvest much but would make the open area large and result in a clearer knowledge of the area open for fishing. It would relieve overcrowding and congestion. Makes sense.
#44	0	9	0	Failed: leave as is. Not necessary because the trolling fishery is not concurrent with the river fishery.
#45	NO ACTION			See #44
#46	NO ACTION			See #44

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Board of Fish Comments for Lower CI Fishfish

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Proposal #	Support	Oppose	Abstain	Summary of Discussion (include minority view)
#47	0	9	0	Failed: Don't need this large of an area closed.
#48	9	0	0	Passed: There is no conservation concern, we don't need the line because it really serves no purpose.
#49	4	5	0	Failed: Those opposed said there was plenty of opportunity with the current gear regulations and Bow and arrow gear would create a safety issue for near by fishermen. Doctors don't need hook & arrow removals. Those in favor thought bow & arrow gear would be ok. They use it in other states.
#50	9	0	0	Passed: Many people who take a fish out of water keep it out too long and don't properly resuscitate it when they put it back, thus increasing the mortality. Why kill it by taking a picture out of the water when you can take a picture while in the water.

