

# MATANUSKA-SUSITNA BOROUGH

350 E Dahlia Ave., Palmer, Alaska 99645

## CHAIRPERSON

Mike Wood



## BOARD MEMBERS

Andy Couch

Howard Delo-VC

Larry Engel

Dan Mayfield

Tam Boeve

Amber Allen

Robert Chlupach

*Ex officio:* Bruce Knowles

## MSB STAFF

Ted Eischeid

## FISH AND WILDLIFE COMMISSION AGENDA Lower Level Conference Room

### REGULAR MEETING                      4 P.M.                      JANUARY 16, 2020

- I. CALL TO ORDER; ROLL CALL; ESTABLISH QUORUM
- II. APPROVAL OF AGENDA
- III. APPROVAL OF MINUTES
  - a. December 19, 2019
- IV. AUDIENCE INTRODUCTIONS & PARTICIPATION (3 min./person, chair's discretion) – 5 minutes
- V. STAFF/AGENCY REPORTS & PRESENTATIONS
  - a. Staff report – 5 Minutes
  - b. Presentation/Dialogue: Meagan Krupa
- VI. ITEMS OF BUSINESS
  1. Elect chair and vice chair for 2020.
  2. BOF Proposals to Support/Oppose – 30 minutes
  3. BOF Booklet Update – 15 minutes
  4. MSB Wetland Legislation/Mitigation Update
  5. Final preparation discussion for BOF UCI Finfish Meeting in ANC Feb. 7-19
- VII. MEMBER COMMENTS – 15 minutes
- VIII. NEXT REGULAR MEETING – February 27, 2020 – AGENDA AND PRESENTATION IDEAS
  - a. BOF Upper Cook Inlet Finfish meeting review.
- IX. ADJOURNMENT

## MSB FISH AND WILDLIFE COMMISSION

### December 19, 2019 – Minutes

#### I. CALL TO ORDER; ROLL CALL

Meeting called to order at 5:05 P.M.

Members present: Mike Wood, Howard Delo, Amber Allen, Larry Engel, Dan Mayfield, Andy Couch (phone), Tam Boeve (phone), Bruce Knowles (phone).

Members Absent: Bob Chlupach (excused).

#### II. APPROVAL OF AGENDA

**MOTION:** Larry Engel moved to approve the Agenda; Howard Delo seconded.

**Discussion:** **Presentation by Dan Coleman, Elodea in the Mat-Su, cancelled so that item V(b) be taken off the agenda.**

**Motion approved as amended unanimously.**

#### III. APPROVAL OF MINUTES

1. November 21, 2019

**MOTION:** Larry Engel moved to approve the November 21, 2019 minutes; Howard Delo seconded.

**Motion approved unanimously.**

#### IV. AUDIENCE INTRODUCTIONS & PARTICIPATION (3 minutes per person at chair's discretion)

Doug Vincent-Lang – ADF&G Commissioner

Bill Stoltz – MSB Fisheries Advocate

- Spoke about being excited about the BOF process and the MSB FWC participation.

John Wood – Board of Fisheries

- Participated in first BOF meeting- went smoothly; proposal to be heard at Kodiak and UCI meeting proposal 37 (paring with Kodiak/Cook Inlet Management Plan). Would like FWC to look at RC 9 and share thoughts with him and/or the board; the BOF staff prepares an index on all the proposals– used by BOF as last minute check – recommends the FWC to get comments in early to be included in the index (by January 23);
- Thinks MSB has an opportunity to work with other stakeholder groups to get fish back in our streams (drift netters, set netters, etc.); and
- Submitted 19 questions and just received a copy of the answers from ADFG this week.

Mac Minard - Consultant

#### V. STAFF/AGENCY REPORTS & PRESENTATIONS

1. Ted Eischeid gave a report on:

1. Observations from December 5<sup>th</sup> meeting  
Provided ideas for next year's meeting – possible a 2.5 hour meeting.

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Doug Vincent-Lang suggested having a staff presentation at an earlier meeting and then have a second meeting for questions/dialogue.

Bruce Knowles: Previously this was primarily meant for legislators – need to keep that in mind. Andy Couch stated that if we submit comments to BOF we need to put them in order. Comments need to be submitted by January 23<sup>rd</sup>.

2. Miscellaneous
3. Packet content review

#### 2. Dialogue with ADFG Commissioner Doug Vincent-Lang:

Larry Engel introduced Commissioner Doug Vincent-Lang:

1. Corridor discussion by Larry Engel – The MSB FWC has spent enormous amounts of their time working on the corridor through legislators and ADF&G. There is a proposal this year to expand the corridor. Do you have any questions on our stance?
  - a. Commissioner stated his largest challenge was controlling the drift gill net fishery. I don't have a lot of tools other than the area; additional tools in his toolbox; drift gill net fishery can take a lot of fish in a 12 hour opening; its all about the opening.

Howard Delo: What kind of management tools?.

DVL: how deep we let drift netters fish their gear. Or something less than a 12 hour opener/ a time and space restriction. the perception is when the setnetters have a 12-hour opening then the drift net fleet is also getting a 12 hour opener – its not written that way in the regulations, but it's a pretty solid assumption of the staff – when you go outside the normal openers and give the set netters an opener, there's a lot of pressure to do the same for drift fleet, essentially seen as a paired opportunity; if as a manager you can have a drift opener less than 12 hours, you feel much more comfortable about allowing that kind of drift net opener; set netters are getting two tide cycles to fish in a typical 12 hour opener (dept. gives them 17 hour opener to accomplish this). Strategy this year was to stick to normal periods and very careful in any other openings; we also delinked set and drift net openers at times. We need guidance as a department on what the "1% rule" means/or should be applied during August- there's a lot of debate on this – 1% for a normal opening, or 1% for a restricted opening?

LE: The commercial fishery is not economically sustainable because there has too many participants and gear. Perhaps a buyback program would help – could Bill look into this?

DVL: because they (the CFEC) haven't gone into reoptimization, ...they place us in a difficult position -

AC: We are trying to maximize fish when we have a harvest by that .... Anchor Point section. When that program was allowed to have double permits...one of the consequences is that there are a bunch of drifters...one of those permits may not have a boat.

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LE: I heard fish are getting smaller by a pound, coming in later (August), quality is like dog-food. Is that a true statement?

DVL: The fish are smaller, but I have no info on quality of fish being caught.

AA: What commercial Sockeye fishery has not been opened at the beginning of the season based on a low projection? With Kings they closed everybody down. The king salmon is most important to us in the MSB.

DVL: Chignik hasn't. Would they go for a catch and release? AA: that is probably better than nothing.

HD: UCIDA turned in many proposals calling for paired restrictions between Kodiak and CI comm fisheries; we have been advocating for this between sport/comm fish with objections from UCIDA, and now we see them trying to use this within comm fish; if BOF passes this, how does it impact paired restrictions within CI? We are proposing a number of proposals with paired restrictions between Kodiak and Cook Inlet. Which paired restrictions would trump the other? This whole thing is getting complicated... any thoughts on this?

DVL: Let's talk about Kodiak first..... We had that three year genetic study back awhile and it was showing some intercepts of Susitna fish, but the question is how real is that data now, and we don't know that – so how do you design a fishery around that three year component? And realizing that the Dept. is probably step forward and do a genetic stock assessment because we simply don't have the money; we won't know with the number of uncertainty – its hard to design a management plan around that uncertainty – that's a Board decision on how much uncertainty they accept in allocating those fish between Cook Inlet and Kodiak. Putting more Sockeye into Cook Inlet when you have low King returns makes Cook Inlet fishery management more complex...the currency in Cook Inlet is Kings in July. I am balancing each time in meeting King salmon EG into the Kenai River and how to knock down the sockeye heading into the Kenai and Kasilof ...and still move enough Sockeye and Coho north – that's the trick – and more sockeye in the Inlet makes that harder...we have never had the perfect storm when we have had lots of sockeye going into the Kenai/Kasilof rivers and you are just tanking on Kings....

HD: Does the Dept. have the authority for the Kenai dipnet fishery to expand it into August?

DVL: No, it closes by regulation; I could reach down into E I guess, but I wouldn't do that – U wkd expect the Board to give me guidance on that. The department needs guidance in August – this year certain things complicated it: 1. We clearly were not going to make a King Salmon escapement goals this year that triggered a closure of east side setnets; 2. paired restrictions go off the books in August, so I would have to reach down into E to put paired restrictions in place, and I'm going to be very careful about using E since I become very allocative when I make those kinds of decisions; 3. Your trying to move fish north, and as you are trying to knock down fish going into the Kenai river you'd like to open up the dipnet fishery; 4. and the last thing is what to do when I am not reaching King numbers in the Kenai

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River with the Coho fishery, because this year I caught hell for not allowing bait on the coho fishery unit August 15 because we have kings spawning down there and I shut down the ES setnet fishery over the concept that every king counts so I caught hell for that decision...Between August 1<sup>st</sup> and August 20<sup>th</sup> MSB FWC should weigh in on how you guys want those fisheries managed, because sockeye are getting later and later to get the numbers...Under the 1% rule I forced that drift net fishery over onto the west side, which pushed fish north to you...HD: Didn't we eliminate the 1% rule on the drift fishery? IP: No, we rolled back the date. HD: We have a couple proposals that addresses the commercial fishery in August. MW: 133, making it later was a significant tweak. DVL: I will prioritize meeting a minimum escapement over overtopping a number, and that discretionary as commissioner – it always hasn't happened that way in the past.

LE: I have a question regarding minimum escapement: The sustainable salmon policy has this concept called a SET, Sustainable Escapement Threshold, which is supposedly set scientifically, but its never been defined - what is a 'SET'?; public wants to know, how low can you go with SEG? At what level do we keep lowering escapement levels?

DVL: Based on science, a SET is probably 1000 Chinook; the minimum population required to maintain a population genetically over time. That's probably then somewhere between 500-1000 individuals.

LE: How about the conservation SOC – its never been defined all these years; The public asks questions, like on Shell Lake – its gone from thousands of fish to only a few hundred - maybe should be a SOC – if we don't define SOC, then we didn't do anything; ADFG needs to define SOC. On the SET, how low do you go?

DVL: We will give that some thought – I'll ask that question internally, I'll get a debate going. I suspect SET is going to be defined as 500-1000 fish.

LE: That's fine, but then a SET definition/number needs to be put into the sustainable salmon fishery regulation so the public has a better understanding.

HD: I would add that in a perfect world, that SET of 500-1000 only meets the biological requirement; in the real world where you have commercial fishing intercept, inriver use, predation... what's a real number that allows losses from this other sources to get you to a final 500-1000?

DVL: That's your MSY level; You manage to an escapement goal, but you are managing a fishery; what's the good of managing for an escapement goal? You need to be managing for a yield.

DM: Looking at wildlife in general, not just fisheries, if you get down to a 1000, sure you can repopulate, but not to a good level;

DVL: For a bear population you can get down to 500 and it can still be sustainable.

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LE: What would be some high research priorities that you would like to see funding for the stocks up here?

DVL: Of course I support the Governor's budget. We really don't know a lot about Coho salmon – clearly more genetic studies; the continuation of the weirs in the Susitna for sockeye. I would like to get your perspectives on what you think of the offshore test net fishery in CI – and I wondered about the utility of the data from the

JW: We need more funding for test net fishery – how do we pay for it? Funding came through here but it was through Bill Stoltz's Senate office and Senator Dunlavey's office. What is it you're lacking to manage your fisheries?

DVL: We can manage with the tools we have, but clearly to answer complex questions we need more genetic research, and we simply don't have the resources to do that. The more you want to learn about how Kodiak fisheries decisions affect Cook Inlet fisheries, the more that requires we collect information that shows the link between the two fisheries – otherwise you are just guessing in the dark – and that requires more genetics studies. We also just don't have enough information on Coho's. The weirs in Susitna in terms of inseason management – its over by the time its done – so do you need all three of them? The utility of the test net fishery is another area we need to look at – when the numbers are high there the comm fish managers say hey there's a lot of fish coming through, and when the numbers are low they say the tide is off – I don't know how you read that information in some consistent fashion, although it does give you a gross index.

JW: Yes, on the numbers you're right, but in the near future you will be able to get some real live genetic data as the catches are being made and use that information for management purposes.

IP: What do you guys in ADFG want to see for management, especially up here in the MSB?

DVL: We relied on the Deshka for inseason management, but with a summer like we just had that becomes difficult; so then we turn to the Little Su, which has its own set of issues.

JS: It seems like the eastside fisheries...our data is not even considered until the fishing season is already over...it seems like we are losing our weirs and we don't have any counters left... Is it helpful for management to know real time data from the UCI for better management?

DVL: Putting a sonar counter in Susitna has been challenging; ideally you'd want a smaller tributary lower in the river to give you an index count; Many years ago we had that in Alexander Creek, but Alexander is now full of northern pike.

MW: I talk to the people who manage the weir...there seems to be a fair bit of unpredictability...when I call in my fish ticket every Tuesday and Friday...I used to get a lot of information from the people taking the fish ticket information in....How much does the department rely on those fish ticket numbers, and

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the staff taking the calls? ...it seems like a pretty valuable one. How does ADFG use the fish ticket numbers to inform their management? Especially at the mouth of the Su.

DVL: We do use that tool.

AC: I would agree with you Mike – that information has some value. But if you just looked at the ND fish district tickets for coho, you would have thought everything would be fine in the rivers, but they didn't turn out.

MW: I didn't see a lot of coho this year – there were way more sockeye. And the cohos were smaller.

DVL: Cohos just didn't show up anywhere.

AC: There was a big harvest of coho in the ND this year; over 50K Coho – that's a big harvest, and it did occur.

DVL: After August we really weren't fishing drifters at all, so cohos were either moving into the ND or the Kenai.

MW: So if there were 50K coho harvested this year in the ND, how does that compare to normal harvest? And the coho were smaller this year, so the poundage should have been much lower than normal. And the sockeye this year were bigger, bigger than the coho.

DVL: The other thing that confuses management in CI is what does it mean to have a commercial priority for sockeye during the month of July and the middle of August? To meet it's a balance of getting fish in there. We did not have drift fishing on Friday, Saturday, or Sunday this year – and I was told I violated the intent of the management plans and the commercial priority by not allowing them to fish at those times.

MM: The value of the test fishery -Are you talking about the concentration of fish or as an indicator of some form of abundance estimate? What was the context of what you were saying?

DVL: Whether it gives you an accurate index of what's coming into CI. This year part of the problem was that fish were running deep, so how good a tool was the test fishery for abundance if the fish were running beneath the nets?

MM: I think the commissioner is giving us some good insights into some limitations he's seeing; I think he had pinpointed a number of things we can focus on and assist the Dept. in coming up with a more solid management approach.

AC: Problem with King Salmon, and having a projection of king salmon – like right now ADFG won't put any projections out for the sport fishing industry until after the BOF meetings; How can we come up with something earlier? The thought I've come up in talking to Sam Ivey on Deshka – the primary deal is we need to have a measure of the the larger fish – you're projecting for the five year old fish, and even the four year old fish; if there was some way the dept. could calibrate those fish as they swim through that weir so we could get a rough and dirty inseason estimate of the larger fish; and then could the dept.

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come up with a projection for the sport industry by the end of November- this projection would benefit the sport industry greatly, even if there were no regulations paired with these rough projections.

DVL: Andy, Let me clarify that I think you misunderstood what I said: We are going to put our projections out before the BOF meetings but we are not going to put out our projected management regime before the BOF meetings – I don't want to put the BOF in a situation where they are hamstrung by my actions. I suspect the projection will be near the minimum, or just above – I suspect if so we will be having a debate on whether we want to allow catch and release fishing as an option for these low numbers of chinooks.

LE: Where do we stand as far as the UCIDA lawsuit with the NPFMC to have federal mgmt. restored to our nearshore waters?

DVL: We've relayed to our US congressional delegation that the state's number one priority is to get that fixed legislatively in Congress; The NPFMC to deferring to the state for state waters mgmt. and having the Feds manage the federal waters, although there is not much of a federal fishery out there in CI.

LE: So its probably not going to go anywhere then.

IP: Allocation plan...the more complex we make these the more difficulty. You have multiple mgmt. plans, hard to manage, many items to be defined; a CI allocation plan? Would having a straight allocation plan be easier than what we are doing now, and would it be possible for managers to do?

DVL: The most difficult decision is what to do with Sockeye. ADFG has recommended a higher goal for sockeye in the Kenai; this higher number will make it easier for the Dept. to manage; What is the priority the FWC views for sockeye in CI?

JW: What would be the results if you just removed the priority all together?

DVL: ...we wouldn't be concerned to have additional openings... we would manage for a PU fishery like we did this year; put fish in river for an OEG.

JW: Would it have any impact at all whether the corridor is open or shut?

DLV: Probably not.

DM: Last Tuesday...MSB Priority list...asked the ADF&G to move its office location to the MSB due to your building issues in ANC. Do you have any thoughts on that?

DVL: That is not a high priority right now. We did talk to the commissioner of admin about it. It is not the highest priority due to costs and the fact that ADFG would have to pay for it out of our own budget. I think we have a good local satellite office out here in Palmer.

MW: Seeing your efforts this year I have been very impressed with your tenure. I was really pleased with the fish we were seeing come back. They were happy until August. I wanted you to hear that.

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BK: One of the things that have stayed the same and changed a couple years was the test fishery...is there anything we can do about that? Can we do this better?

DVL: We have been thinking about that but we need to figure out how to fund that...we need a better index, and we have to determine whether the test fishery provides a useful index.

HD: I was pleased and surprised as I followed the commercial fishery during the season on how well it was managed. I just want to thank you for trying to put some sense back into the commercial fishery.

DVL: We wanted to provide a model to you on how comm fish might be managed to benefit all users. It has given us a chance to prove, if it is used, that it works when it is implemented. I just urge you all as we move forward; let's try to keep interest in fish moving forward... Note that the MMPA has created a large number of top predators on salmon.

JW: Thanked DVL for how he's managing things.

LE: Hatcheries and the large pink salmon production in them – have you thought about researching the negative impacts?

DVL: We are not looking at increasing salmon hatchery production.

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#### VI. ITEMS OF BUSINESS

##### 1. Set 2020 MSB FWC Regular Meeting Schedule

**Discussion:**

**Dan Mayfield made a motion to adopt the 2020 MSB FWC meeting schedule that was submitted by staff; Larry Engel seconded.**

**Discussion:** Amber Allen suggested making the meeting start time earlier;

**Dan Mayfield moved to amend the start time to 4:00 PM; Larry Engel seconded; Mike Wood stated that we tried it at 3:00 last year but we don't get much public;**

**Amendment to move meeting time to 4:00 passed unanimously.**

**Motion to adopt the 2020 MSB FWC with 4:00 start time passed unanimously.**

##### 2. December 5<sup>th</sup> ADF&G question discussion

Mike Wood stated he agreed with Ted Eischeid's understanding of the meeting and suggestions for next year. Howard Delo stated they did a nice presentation – all of that information went right over everyone's head that was in there.

##### 3. BOF Proposals to Support/Oppose

This would be a great place to have a subcommittee meet before our next meeting (January 16, 2020); Mike Wood appointed himself, Andy Couch, and Amber Allen.

**Discussion:** **The FWC went over ways to present and provide reasons why you approve or oppose. Mac Minard said he could lend a hand, especially after January 11 - Maybe use the road map that is going to be presented the Commissioner; Larry Engel: Look at the KRSA evaluation of BOF proposals as a starting point, as well as what the Commissioner said today; Howard Delo: Don't need to comment on every proposal, instead focus on Kenai and Northern District – our comments should be: "we agree with the concept described in the proposal." John Wood: Indicate not only where you stand, but why you stand that way – if you have specific language you should this in your comments. Amber Allen noted that she would be available after January 6. FWC agreed with the appointment of the subcommittee.**

##### 4. FWC's BOF Booklet consideration

**Howard Delo made a motion to allow the subcommittee (Howard, Larry, Andy – Mike as ex officio) to approve the "Board of Fish" booklet for submission to BOF; Mike Wood seconded.**

**Discussion: IP: You can RC the full glossy booklet at the BOF meeting to get it into people's hands, and the color version does matter to people. We can send an email to**

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Glen Haight to forward to all commissioners; mail copy to each BOF member; submit as an RC;

**Motion approved unanimously.**

5. Nominate Larry Engel for the Governor’s Conservationist of the Year Award – Nomination due by January 15, 2020.

**Howard Delo made a motion to nominate Larry Engel for the Governor’s Conservationist of the Year Award; Mike Wood seconded.**

**Discussion:** John Wood suggested to include the assistance that Larry Engel provided to the Governor’s office; Bill Stoltz added some insight on Larry Engel and his help. Howard Delo volunteered to do the write up (due by January 15, send to Kari Winkel at Kari Winkel at [kari.winkel@alaska.gov](mailto:kari.winkel@alaska.gov))

**Motion passed unanimously.**

#### VI. MEMBER COMMENTS

Howard Delo: I think it is great that this award nomination came up; I think we are going to be really busy getting ready for the BOF meeting; encouraged members to attend.

Larry Engel: In preparing for this BOF meeting – we have had a lot of help from Kevin, Ray, Mac – this has been accomplished because of the assistance from KRSA.

Amber Allen: I won’t be able to do the full two weeks at BOF – I will see if I can be there a few days if you can tell me when I should be there – public testimony and speaking with the press.

John Wood: Seven member board – three of us new members; I would not limit yourself with how things have been done in the past; forget what happened in 2014 or 2017 when approaching the new BOF members. I see with this commissioner, somebody that is very receptive the MSB issues.

Ted Eischeid: Reached out to Bob Chlupach and Bruce Knowles about historic salmon run work, and learned that Bob is thinking about resigning from the commission.

Mike Wood: Building relationships with set netters and Anchorage folks; can a group get together and speak – maybe one or two with different organizations. Every piece of outreach that we do is important. I’ve forged some of these relationships – suggest having strategic lunches.

Israel Payton: What is the hard deadline of dates to forward items to the commission for your booklet (January 10<sup>th</sup>); I am going to work on some public outreach – I think we are going to have a low turnout of public (like 2017); going to see about being able to sign up for block of times; it is very important to build relationships with the BOF members.

Andy Couch: I appreciate the opportunity to tele-conference in; I appreciate you all doing all the work.

Mac Minard: Get ready to rock and roll.

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VII. NEXT REGULAR MEETING – Thursday, January 16, 2020 @ 4:00 – AGENDA AND PRESENTATION IDEAS

VIII. ADJOURNMENT

**MOTION: Howard Delo moved to adjourn the meeting; Larry Engel seconded.**

**Motion approved unanimously.**

**Meeting adjourned at 7:56 PM.**

\_\_\_\_\_  
Mike Wood, Chair

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Dated

\_\_\_\_\_  
Ted Eischeid, Planner II Staff

\_\_\_\_\_  
Dated



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**Staff Report – FWC – 16 January 2020**

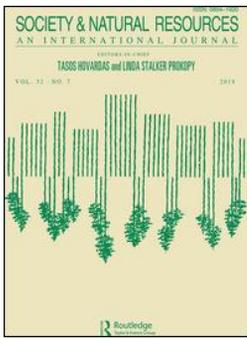
1. Krupa et al. Published Paper: Public Process and the BOF
2. Moosey letter comment for Kodiak Finfish BOF meeting
3. Wetland Ordinance update
4. BOF process overview
5. FWC Chair/Vice-Chair Election Procedures

*Providing Outstanding Borough Services to the Matanuska-Susitna Community*

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## Who's Winning the Public Process? How to Use Public Documents to Assess the Equity, Efficiency, and Effectiveness of Stakeholder Engagement

Meagan Boltwood Krupa, Molly McCarthy Cunfer & S. Jeanette Clark

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# Who's Winning the Public Process? How to Use Public Documents to Assess the Equity, Efficiency, and Effectiveness of Stakeholder Engagement

Meagan Boltwood Krupa , Molly McCarthy Cunfer, and S. Jeanette Clark 

National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara, CA, USA

## ABSTRACT

It is widely recognized that stakeholder engagement processes produce advantages, but few studies acknowledge that they also can produce disadvantages. There is a global need to better assess stakeholder engagement processes by defining success and developing new methods to analyze stakeholder participation data. Our method of digitizing and coding stakeholder communications (1) produces a wide range of analyses, (2) tells the story of governance over time, (3) is comparable with other datasets, and (4) can be used wherever public documents exist. We demonstrate the utility of these integrated methods by examining statewide differences in public participation and success rates in Alaska's Board of Fisheries' (Board) proposal process. We determine that significantly different participation and success rates across the state indicate the existence of disadvantages and the need for further investigation into the equity, efficiency, and effectiveness of the Board process.

## ARTICLE HISTORY

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## KEYWORDS

Fisheries governance; fisheries management; natural resource management; public participation; stakeholder engagement; social ecological system

## Introduction

After the absence of major stakeholders in decision-making was recognized as a contributor to global fisheries collapse (Jentoft 1989; Cochrane 1999), agencies began to adapt their management processes to include stakeholders (Santiago et al. 2015; Dixon 2016; Pomeroy et al. 2016). Freeman (1984) defined a stakeholder as “any group or individual that can affect or is affected by the achievement of a corporation's purpose.”

Involving stakeholders in decision-making processes produces numerous advantages, ranging from achieving mutual understanding to improving regulation compliance (von Wirth et al. 2014; Butler et al. 2015; Ballou, Albritton, and Horowitz 2016). Stakeholder engagement is a strategic management perspective aimed at capturing knowledge, but it

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can also create inclusive decision-making, promote equity, and build social capital (Mathur, Price, and Austin 2008).

While this list of advantages appears impressive, none of these studies has examined the diversity of participants or whether there are structural, technical, or financial barriers to equitable, efficient, and effective participation. These advantages were generally identified through surveys administered by social scientists during or after stakeholder engagement processes. The advantages rarely appear as initial objectives. Reed (2008) advocated that “the process needs to have clear objectives from the outset and should not overlook the need for highly skilled facilitation.”

Over a decade later, very few of these processes have intentionally developed specific goals and objectives beyond meeting the criteria of establishing some type of stakeholder interaction. It is unlikely that all stakeholder engagement systems only produce advantages. Given this reality, there is little to no acknowledgement that some public processes could be causing more harm than good. While certain stakeholders and managers are clearly benefiting from the process, it is possible that not everyone shares in this success.

What if these systems are inherently biased against certain stakeholders? What if one group is allowed to “bully” a process because they possess the time and money it takes to effectively participate? What if the inefficient and combative structure of certain public testimony hearings exacerbates conflict between user groups? What if the public processes have decreased in utility over time because they haven’t modernized? Each of these questions challenges the assumption that the mere existence of stakeholder participation equals success.

Participation processes can strengthen current privileges and inhibit the expression of minority opinions (Nelson and Wright 1995). Empowering historically marginalized sectors to interact with power structures may produce negative interactions (Kothari 2001). Reed (2008) argued that the institutionalization of stakeholder participation was essential to overcome the limitations of a process dependent upon negotiated goals and uncertain outcomes. The danger is that this institutionalization may have produced internal processes that reflect institutional biases, such as environmental racism. Environmental racism was first defined as “the disproportionate impact of environmental hazards on people of color” (Bullard 1990). A recent study of this injustice demonstrated that people of color have a higher probability of living near pollution (Mikati et al. 2018). When people are not seen as powerful or do not have the education, time, and money to effectively attend meetings, they frequently are not seen as stakeholders. If you are not acknowledged as a stakeholder, you can not make things happen. Things happen to you.

Stakeholder engagement processes around the globe may benefit from a structured and quantitative examination of issues such as equity (i.e., diversity and inclusion), efficiency, and effectiveness. Semi-structured interviews produce many of the stakeholder participation studies (e.g., Pita, Pierce, and Theodossiou 2010; Carr and Heyman 2012; Young et al. 2013), but this approach may not reflect the true utility and diversity of governance participation. To obtain a holistic perspective of what is really happening in stakeholder engagement, we propose a more direct method that first establishes goals and objectives and then produces quantifiable results comparable with other biological, economic, and social datasets.

The pressing need to increase the accountability of stakeholder engagement systems can be addressed by (1) identifying general goals and localized objectives that define successful

stakeholder participation – ideally before the process takes place; and (2) conducting quantitative and qualitative analyses to determine if and how existing and future stakeholder engagement systems could be improved to better support these goals over time.

Since many stakeholder engagement processes have been in place for decades without clear goals and objectives, we suggest that retrospective stakeholder assessment goals should include the “3 E’s” of equity, efficiency, and effectiveness. Equity captures the ability of a diverse group of stakeholders to participate in the process. This involves adapting the process to acknowledge and overcome the constraints of socio-economic, cultural, racial, and gender differences that inhibit inclusion. Efficiency achieves the localized objectives of stakeholder engagement while maximizing the use of scarce resources. Effectiveness is the ability of a process to meet its goals and objectives in terms of both public and management needs.

Each stakeholder process can then be designed to meet localized objectives that support the guiding goals. Localized objectives could include anything from meeting specific agency mandates to addressing larger community concerns. Objectives will differ across public processes but all work toward achieving the goals. For example, if the goal is to ensure equity in a public process, then the localized objectives could include (1) subsidized travel costs, (2) childcare, and (3) interpretive language services. These specific and localized objectives promote equity by eliminating barriers to participants’ attendance.

With the establishment of “3 E” goals and localized objectives, the system can be audited to determine if the process is meeting the terms of success. One method of auditing the 3 E’s is to digitize and code the public documents that are produced through the stakeholder engagement process. Stakeholder communications, such as public proposals and comments, have the ability to directly inform natural resource management. These underutilized documents contain demographic information and provide insights into the successes and failures of both stakeholder processes and management measures. After these documents are quantified into a dataset, follow-up qualitative analyses can help explain the results and provide a pathway to supporting successes and resolving challenges.

We use an Alaskan case study to show how a digitization and coding method of archived public documents can be used to analyze one specific stakeholder process within the framework of the 3 E’s. Alaska was chosen because the Board of Fisheries (Board) was one of the first stakeholder engagement processes and has a relatively long history of public records.

The Board is lauded as a key component to Alaska’s fisheries management successes, but nobody has defined the measures of success or investigated how the process is functioning. Research into the guiding Board documents produced very little insight into the definition of a successful public process – other than a public process was put into place in 1959 and continues to exist. Most of the statutory and public information focuses on the role and composition of the Board (Alaska Department of Fish and Game (ADFG) 2019a). Since the Board process does not have clear goals and objectives, the 3 E’s is used to frame the discussion of how the public process is performing. Although the Board process has not significantly changed since 1959, Alaska has changed. The increasing urbanization of Alaska parallels the Columbia Basin, bringing the challenges of population, pollution, and pavement to the Last Frontier.

Every three years, the Board requests regional fisheries management proposals. According to the Alaska Department of Fish and Game's (ADFG) website, the Board process is "among the most open regulatory processes in Alaska if not the nation" (Alaska Department of Fish and Game (ADFG) 2019b). "Anyone can submit a proposal and provide written or oral testimony on any of the proposals, which constitute potential regulatory changes and are accessible in an online proposal book" (Alaska Department of Fish and Game (ADFG) 2019b). Board staff log the proposals and store them online in meeting documents or in boxes at Juneau's State, Library, Archives, and Museum (SLAM). The proposals provide detailed information about stakeholder demography, organizational memberships, and positions.

We assess stakeholder engagement by using a case study to test the 3 E's framework through an integrated digitization and coding method. By transforming stakeholder communications into a dataset that produces a wide range of analyses, it is possible to more accurately study governance over time. The method can be used wherever public documents exist, and the resulting dataset is comparable with other biological, economic, or social datasets.

The Board proposal dataset provides only one example of this method's utility. The dataset has the capacity to support the Board and fishery managers but also stakeholders and scientists. We begin with an overview of the complexity of Alaska's fisheries governance system.

## **Alaskan Fisheries Governance**

The Magnuson-Stevens Fishery Conservation and Management Act established the North Pacific Fishery Management Council (NPFMC) in 1976. The NPFMC manages Alaska's fisheries from 3 to 200 miles offshore (NPFMC 2019). The Board and ADFG govern inland fisheries to three miles offshore. The U.S. Fish and Wildlife Service (USFWS) manages freshwater and subsistence fisheries on federal lands. ADFG fishery managers are tasked with conservation management. The Board mostly makes the allocation management decisions but is also tasked with determining conservation measures and facilitating public communication. This division is generally seen as beneficial, extracting the allocation issue from conservation management and state politics. The Governor appoints the seven Board members, who are then confirmed by the legislature. Board members should represent the diversity of fishing sectors and geographies. Members are appointed based on their "interest in public affairs, good judgment, knowledge, and ability in the field of action of the Board, and with a view to providing diversity of interest and points of view in the membership" (Alaska Department of Fish and Game (ADFG) 2019b).

Local fish and game Advisory Committees (ACs) were created at the outset of the Board process to facilitate regional participation. Although the ACs have no regulatory authority, they provide localized knowledge. Currently, there are 84 ACs made up of 9–15 members. The ACs meet one to six times a year. The State supports these meetings with regional biologists and travel support. (Alaska Department of Fish and Game (ADFG) 2019b).

The Board reviews proposals every three years or “out of cycle” to address unexpected problems (Alaska Department of Fish and Game (ADFG) 2019b). The cycle starts with an announcement requesting public proposals using a standardized form (Supplementary Appendix A). Each submission describes the suggested action and potential impacts to other users (Supplementary Appendix A). Board staff compiles the proposals and then presents them to the public for review and comment before the Board decides on implementation. The cycle concludes with regulatory meetings which include public testimony and usually are held between October and March (Alaska Department of Fish and Game (ADFG) 2019b).

According to the ADFG website, “the Board uses biological and socioeconomic information from ADFG, public comments, and guidance from the Alaska Department of Public Safety and Alaska Department of Law” in its regulatory decisions (Alaska Department of Fish and Game (ADFG) 2019b). The Board’s daunting task is to manage diverse fisheries across a geographically and culturally complex state.

In support of improving the Board process, the primary goals of this study are to (1) provide the Board and the public with useful information to help navigate the complex waters of Alaskan fisheries governance and (2) develop a universal method for assessing stakeholder engagement systems with the objective of improving their equity, efficiency, and effectiveness.

## Methods

This paper utilizes the methods from a three-region, 15-year pilot study that was completed in 2018 (Krupa et al. 2018a). Our study used the Board proposals, which are found online as PDFs at the ADFG Board website from 2003 to present and in paper format at State Library, Archives, and Museum (SLAM) in Juneau, Alaska, from 1960 to 2003 (Alaska Department of Fish and Game (ADFG) 2019c). The paper SLAM records were digitized into PDFs.

We individually logged and coded 24,731 Board proposals submitted between 1960 and 2016 using a spreadsheet-based program (Krupa, Cunfer, and Clark 2017). We modeled the coding system on a PowerPoint presentation given by former Board Chair John Jensen (Jensen 2014). The expanded dataset in this study records 19 variables, a selection of which are described in Table 1. A coding manual describes how to code each of these variables (Krupa, Cunfer, and Clark 2018b). For example, the manual contains specific definitions for the proposal authors’ groups. The coding process was governed by frequent quality assessment, with random and repeat sampling to check for accuracy, correct errors, and adapt the coding process as needed.

The results were published in two open access venues: (1) the Knowledge Network for Biocomplexity (KNB) on DataOne (Krupa, Cunfer, and Clark 2017) and (2) an R Shiny App (Krupa et al. 2018c). The KNB dataset, which requires technical knowledge to utilize, was intended for research scientists. The R Shiny App was intended for non-scientists. While the KNB dataset provides the capacity for more detailed analysis, the R Shiny App allows non-scientists to conduct generalized assessments with otherwise inaccessible data. We hope that this combination of analytic tools will improve the transparency and utility of our method but recognize that there is more work to be

**Table 1.** Coded variables and allowed values<sup>a</sup>.

Variable	Definition and allowed values
Date	Any date, formatted as YYYY-MM-DD
Area	Primary area(s) that the regulation change pertains to. Allowed values: Statewide, Alaska Peninsula and Aleutian Islands, Arctic, Bristol Bay, Chignik, Cook Inlet, Copper River, Kodiak, Kotzebue, Kuskokwim, Norton Sound, Prince William Sound, Southeast, Yukon
Meeting	Meeting name as listed in documents
Species	Primary species that the regulation change pertains to. Allowed values: Groundfish, Herring, Salmonids, Shellfish, Other
Sector	Primary sector that the regulation change pertains to. Allowed values: Commercial, Personal Use, Sport Fish, Subsistence
Proposal number	Proposal number as listed in meeting documents
Regulation number	Regulation(s) proposed to be changed
Action	Board action on proposal. Allowed values: C (Carried), C/A (Carried w/ Amendment), N/A (No Action), T (Tabled), U (Unlisted), F/A (Failed w/ Amendment), F (Failed)
Proposed by	Name(s) of proponents for proposal
Group	Classification of proponent(s). Allowed values: Individual, AC (Advisory Committee), ADFG (Alaska Department of Fish and Game), Association, Board of Fisheries, Business, Government, Hatchery, Tribe/Village Council
Members in favor	Number of board members voting in favor
Members against	Number of board members voting against

<sup>a</sup>For a full list of coded variables and definitions, refer to Krupa, Cunfer, and Clark (2017).

done in building accessible data tools. We used the KNB dataset to examine stakeholder participation and success rates.

Our analysis focused on (1) stakeholder participation (proposals) in each region, group, sector; (2) stakeholder success (actions) for each region, group, and sector; and (3) stakeholder participation (proposals) over time by group and gender. We used R statistical software, supported by MASS, nnet, effects, tidyverse, and ggplot2 to complete the analyses. We removed incomplete records and chose baseline values. We chose all statewide proposals as the Region baseline; Individuals as the Group baseline; Commercial as the Sector baseline; and No Action (N/A) for the Action baseline. In many cases, there are multiple groups, regions, and sectors associated with each proposal in the dataset. In this analysis, only the first region, group, sector listed was considered for each proposal.

A Chi-squared test for independence was run to determine association between the proposal action and the targeted proposal region, or if there was a regional difference. A second Chi-squared test determined the association between proposal action and group, or if the action varied according to group. A third chi-squared test determined the association between the proposal action and sector, or if the proposal action varied according to sector.

A proportional odds model determined the likelihood of action related to group. A multinomial logistic regression model predicted a superior fit following a Chi-square goodness of fit test. We then used the model to determine success derived from (1) region, group, and sector; (2) the likelihood of a proposal carrying or having no action according to its region, group, sector; and (3) marginal effects.

To examine the influence of ADFG proposals on regional success, we removed ADFG from the above analyses to determine whether its absence would significantly alter the results by region. Finally, we used a time-series plot of the data to examine

participation over time. Because the Board process is on a 3-year cycle with considerable variability in participation over each cycle, we fit the annual data with a generalized linear model based on a Poisson distribution. Two time-scale analyses included all groups and the three least successful groups (Tribe/Village Councils, Individuals, Associations).

To estimate gender participation over time, we filtered all proposal submitters for the group "Individual," and considered them unique participants. We then extracted their first names and removed punctuation and common honorifics. To assign a gender, first names were compared to United States Social Security Administration baby name data using the R package Gender (Mullen 2018). We used this method to match each name to a proportion of males and proportion of females given that name between 1900 and 2000. Ambiguous names where the proportion of one gender was between 25% and 75% were removed from the dataset. Using this method, 94% of first names were matched to a non-ambiguously gendered name.

We used decennial Census data with 2017 American Community Survey data for total female population data (Manson et al. 2018). Commercial fishing data was taken from the Commercial Fisheries Entry Commission (CFEC) (ADFG 2016). The same method used to match Board participants to a gender was used for Alaska resident commercial fishing permit holders. Using this method, we matched 96% of first names to a non-ambiguously gendered name. An Alaska resident sport fishing license dataset, which includes gender, provided the sport fishing data (ADFG 2016a). The permit data does not include all fishing residents. Alaskan residents need to purchase a license between the ages of 18 and 59. Individuals under the age of 18 do not need to obtain a license and can fish for free. Individuals over the age of 60 are eligible for a free Permanent Identification (PID) card. These unlicensed age groups are not included in the analysis.

## Results

### Region

We used a chi-squared test to explore whether the proposal action was unaffected by the proposal region or if independence exists between the two variables of action and region (Table 2). A  $p < 0.05$  strongly suggests the action varies according to area.

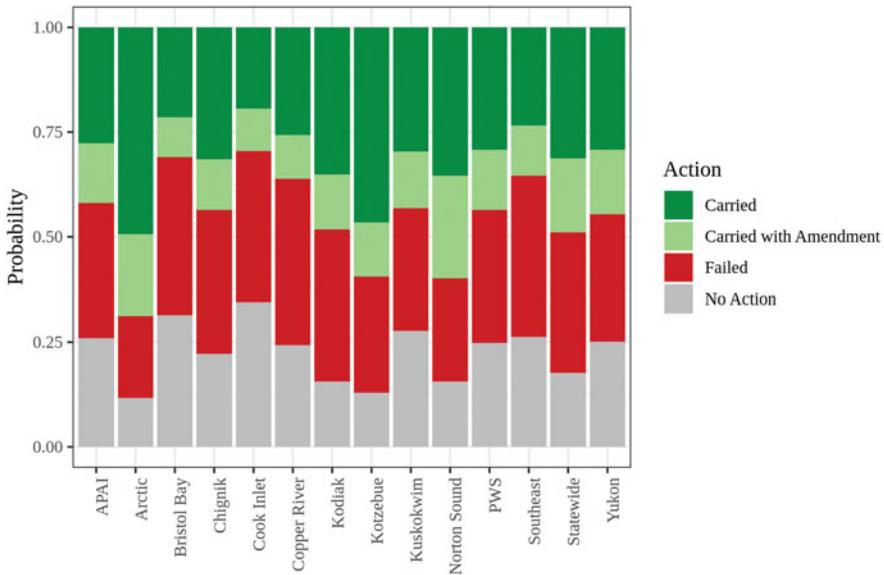
The probability of a statewide proposal carrying ( $p_c$ ) is 0.31. Five regions surpass this statewide rate: the Arctic, Kotzebue, Norton Sound, Kodiak, and Chignik. Yukon, Prince William Sound, and Kuskokwim have a probability of approximately 0.30. The regions with the lowest probability of a proposal passing are Bristol Bay ( $p_c = 0.21$ ) and Cook Inlet ( $p_c = 0.19$ ) (Figure 1).

Arctic and Kotzebue proposals are the most likely to succeed with nearly a 0.5 probability of a proposal carrying, but these regions also have a high proportion of ADFG submissions. The Arctic's success rate is very high due to a high number of ADFG proposals. Cook Inlet proposals are the least likely to be carried, with  $< 0.20$  probability of a proposal carrying. Cook Inlet also has the highest probability of no action (Figure 1), which is indicative of the large volume of repeat proposals generated by that region.

**Table 2.** Action by region contingency table.

	Statewide	API <sup>a</sup>	Arctic	Bristol Bay	Chignik	Cook Inlet	Copper River	Kodiak	Kotzebue	Kuskokwim	Norton Sound	PWS <sup>b</sup>	Southeast	Yukon
N/A	221	490	9	626	81	1522	118	208	15	111	47	284	1381	229
C	391	522	38	428	115	856	125	467	54	119	107	334	1231	267
C/A	221	270	15	191	44	444	51	175	15	54	74	164	630	140
F	418	606	15	751	125	1585	193	480	32	117	74	361	2016	277

<sup>a</sup>API: Alaska Peninsula and Aleutian Islands; <sup>b</sup>PWS: Prince William Sound. Call: xtabs (formula = ~Action + Region, data = data). Number of cases in table: 19,934. Number of factors: 2. Test for independence of all factors: Chisq = 650.5, df = 39, p-value  $\ll$  0.05.



**Figure 1.** Regional probability of Board of Fisheries proposals by action.

**Table 3.** Action by group contingency table.

	AC	ADFG	Association	Board of Fisheries	Business	Government	Hatchery	Individual	Tribe/ Village Council
C	339	3,624	251	72	93	78	28	554	15
C/A	307	990	331	44	55	51	30	649	31
F	1,102	307	1271	30	480	85	7	3657	111
N/A	687	471	992	25	186	71	30	2790	90

Call: xtabs (formula = ~Action + Group, data = data). Number of cases in table: 19,934. Number of factors: 2. Test for independence of all factors: Chisq = 8,601, df = 24, *p*-value << 0.05.

Removing ADFG from the analysis does not change any of the results in the Group section since the groups are independent. However, the regional results do change with ADFG’s removal. Kotzebue and Norton Sound are still slightly more likely to have successful proposals, but the remaining regions are tightly clustered. The Arctic is not interpretable because of the high number of ADFG proposals. Cook Inlet still has the highest probability of No Action.

**Group**

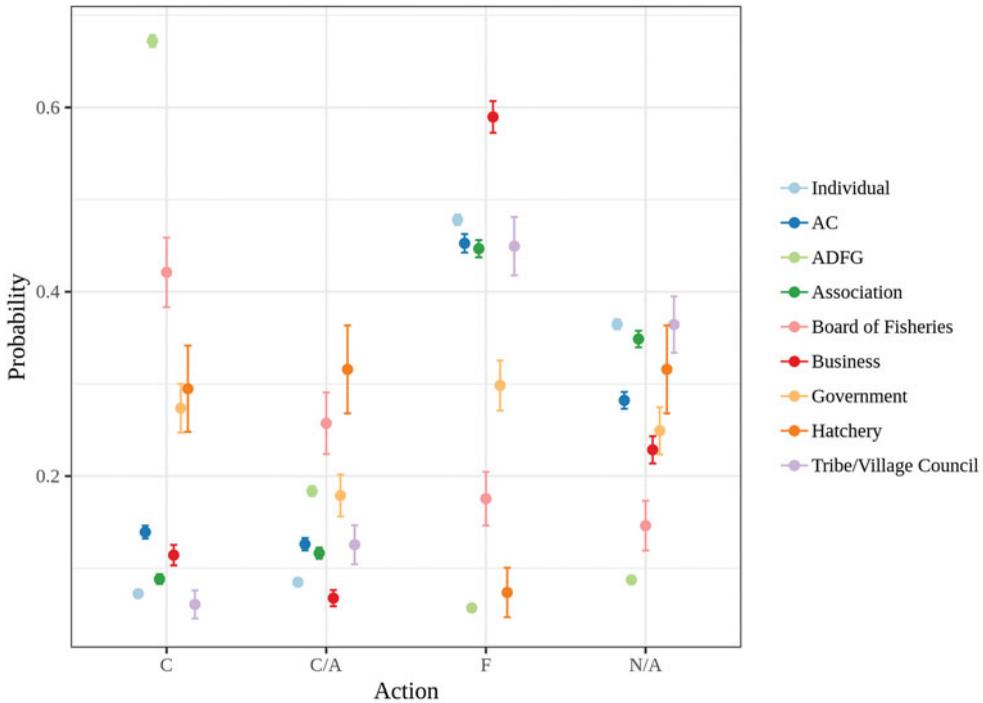
To determine association between the proposal action and the group, we conducted a Chi-squared test. A *p* < 0.05 determined that the proposal action varies from the submission group (Table 3).

ADFG submitted the second highest number of proposals, distantly followed by Associations, ACs, Businesses, Government, Board, Tribes/Village Councils, and Hatcheries (Table 3). The other groups submitted much fewer proposals.

According to the multinomial model (Table 4), the log odds of carrying as opposed to no action differed across groups. In other words, the odds of a proposal carrying increase by 0.91 if it is submitted by an AC as opposed to an individual (Table 4). The

**Table 4.** Multinomial model results for action by group.

	(Intercept)	AC	ADFG	Association	Board of Fisheries	Business	Government	Hatchery
C	-1.62 ± 0.05 <i>p</i> << 0.05 <i>z</i> = -34.76	0.91 ± 0.08 <i>p</i> << 0.05 <i>z</i> = 11.23	3.67 ± 0.07 <i>p</i> << 0.05 <i>z</i> = 54.142	0.24 ± 0.09 <i>p</i> = 0.004 <i>z</i> = 2.87	2.67 ± 0.24 <i>p</i> << 0.05 <i>z</i> = 11.30	0.92 ± 0.14 <i>p</i> << 0.05 <i>z</i> = 6.83	1.71 ± 0.17 <i>p</i> << 0.05 <i>z</i> = 10.03	1.55 ± 0.27 <i>p</i> << 0.05 <i>z</i> = 5.80
C/A	-1.46 ± 0.04 <i>p</i> << 0.05 <i>z</i> = -33.46	0.65 ± 0.08 <i>p</i> << 0.05 <i>z</i> = 8.029	2.20 ± 0.07 <i>p</i> << 0.05 <i>z</i> = 31.03	0.36 ± 0.08 <i>p</i> << 0.05 <i>z</i> = 4.69	2.02 ± 0.25 <i>p</i> << 0.05 <i>z</i> = 7.96	0.24 ± 0.16 <i>p</i> = 0.13 <i>z</i> = 1.50	1.13 ± 0.19 <i>p</i> << 0.05 <i>z</i> = 5.98	1.46 ± 0.26 <i>p</i> << 0.05 <i>z</i> = 5.57
F	0.27 ± 0.03 <i>p</i> << 0.05 <i>z</i> = 10.76	0.20 ± 0.06 <i>p</i> << 0.05 <i>z</i> = 3.69	-0.70 ± 0.08 <i>p</i> << 0.05 <i>z</i> = -9.01	-0.02 ± 0.05 <i>p</i> = 0.64 <i>z</i> = -0.46	-0.09 ± 0.27 <i>p</i> = 0.74 <i>z</i> = -0.32	0.68 ± 0.09 <i>p</i> << 0.05 <i>z</i> = 7.53	-0.09 ± 0.16 <i>p</i> = 0.57 <i>z</i> = -0.56	-1.73 ± 0.42 <i>p</i> << 0.05 <i>z</i> = -4.10



**Figure 2.** Probability of Board of Fisheries proposal action by group.

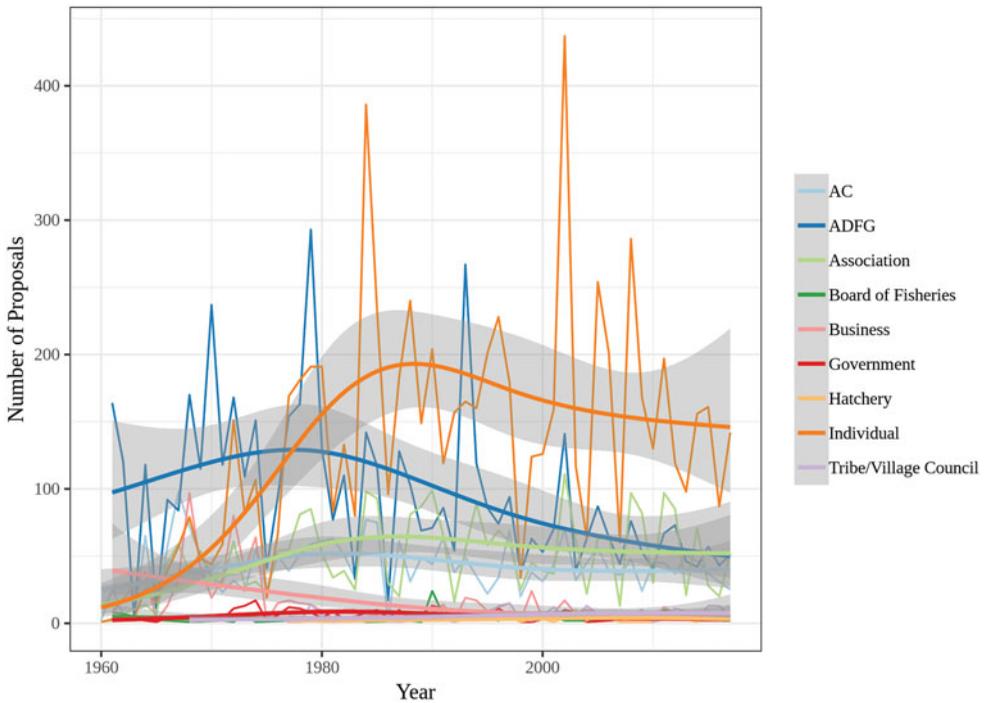
**Table 5.** Action by sector contingency table.

	Commercial	Personal use	Sport fish	Subsistence
C	3,504	69	1,011	465
C/A	1,722	62	456	245
F	5,199	164	1,327	357
N/A	3,563	182	1,148	442

Call: xtabs (formula = ~Action + Sector, data = data). Number of cases in table: 19,916. Number of factors: 2. Test for independence of all factors: Chisq = 179.07, df = 9, *p*-value << 0.05.

log odds of an ADFG proposal carrying will increase by 3.66, producing the greatest odds.

The marginal effects of the multinomial model produced intriguing results. An AC has an average proposal carrying probability of 0.32. All other groups average 0.25. Therefore, AC proposals have an 8% greater chance of carrying than the other groups. Conversely, an AC proposal is 3% less likely to fail, and 7% less likely to receive no



**Figure 3.** Number of Board of Fisheries proposals by group over time.

action than other groups. These probabilities clearly show that a proposal submitted through an AC is more likely to succeed (Figure 2).

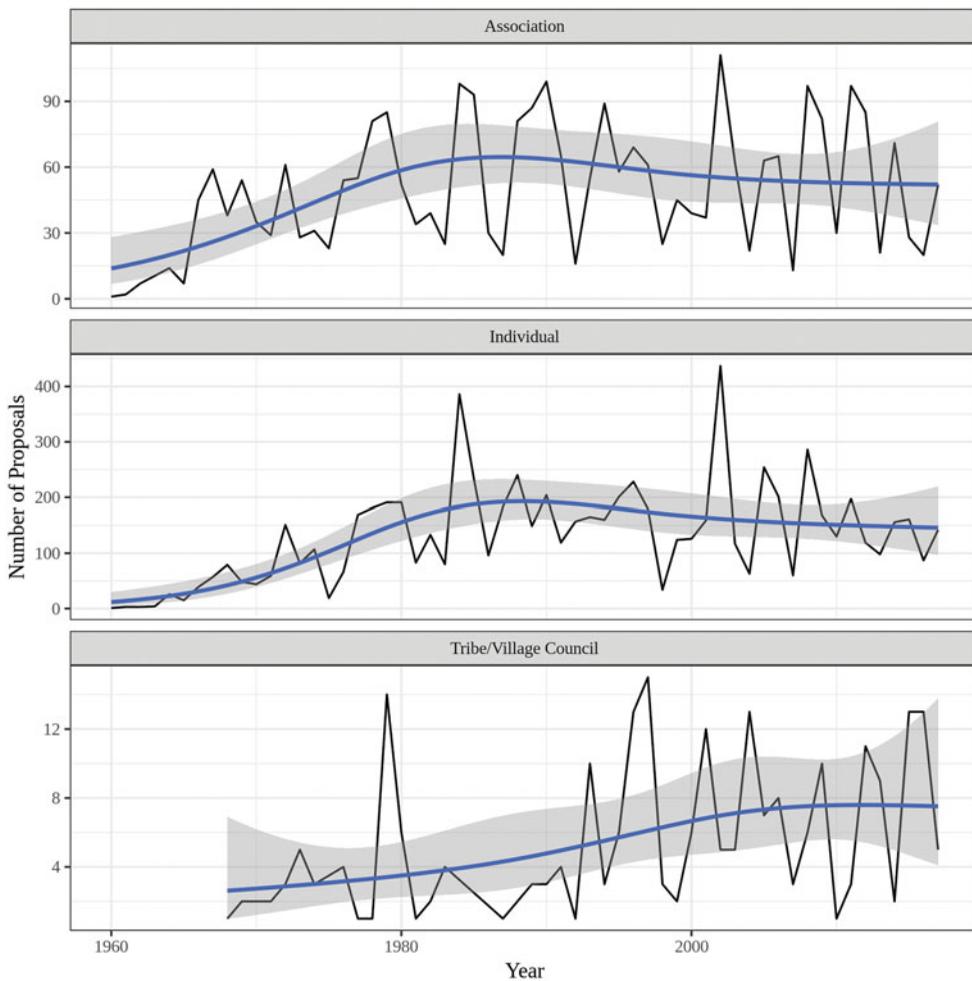
ADFG is still by far the most successful group with  $>0.60$  probability of a proposal carrying. Individual, Association, Business, AC, Tribe/Village Council are the least successful groups with  $>0.40$  probability of a proposal failing (Figure 2).

### Sector

We performed a Chi-squared test to determine association between the proposal action and the target sector. A  $p < 0.05$  demonstrated that proposal action varies according to sector (Table 5). The proposal sector with the highest probability of being carried is the Subsistence sector, with a probability of 0.31. Sport Fish and Commercial proposals both have a probability of 0.25 of being carried, while Personal Use proposals have a probability of 0.14.

### Participation over time by group

Over the course of the Board existence, three groups have been significantly less successful than the others: Individuals, Associations, and Tribes/Villages Councils. To examine whether this overall lack of success is accompanied by a change in participation, we examined the total number of proposals submitted by these three groups through time. Individual participation increasingly rose during the first two decades of the process, peaked in the late 1980s and early 1990s, and then steadily declined to the present day (Figures 3 and 4). Association participation has remained relatively stable



**Figure 4.** Number of Board of Fisheries proposals submitted by associations, individuals, and tribes/village councils over time.

over time (Figure 4). The participation of Tribes/Village Councils slightly increased, but participation rates are still extremely low for this group across the entire time period (Figure 4).

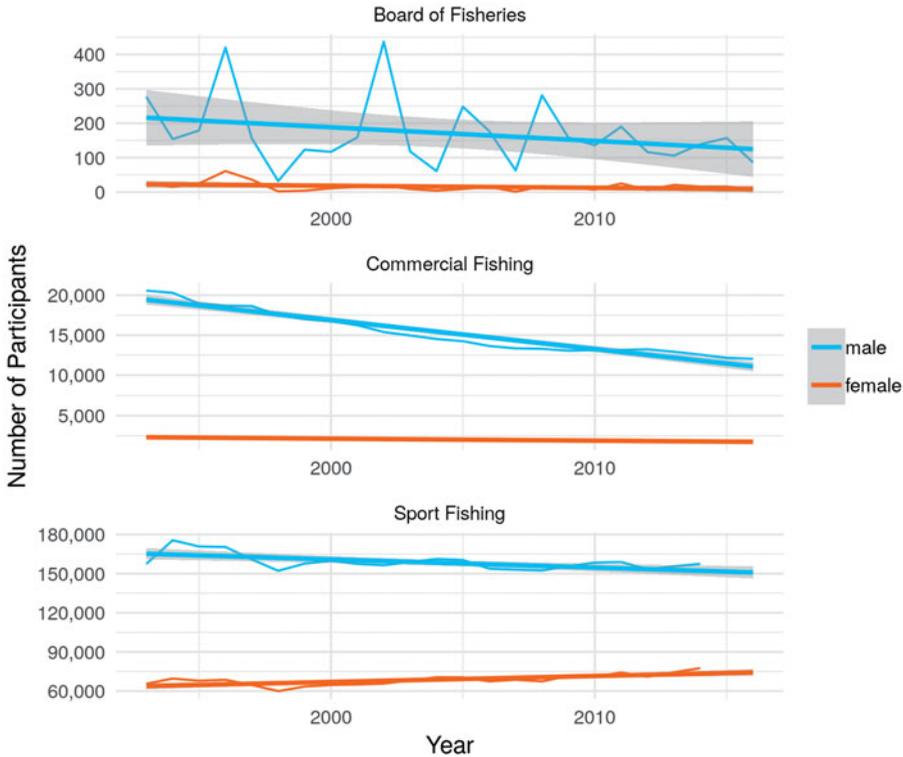
### **Participation over time by gender**

To test whether gender and fishing sector participation are independent, we performed a Chi-squared test on a sample ( $n=500$ ) of the data across all years (Table 6). The  $p$ -value  $<0.05$  indicates that gender and sector are not independent. We repeated this test for a sample ( $n$  = smallest number of observations among sectors in each year) and confirmed that for every individual year, the gender and sector are also not independent.

We then calculated the slope of the change in sector participation (Figure 5). Female participation is significantly increasing for both commercial fishing and sport fishing

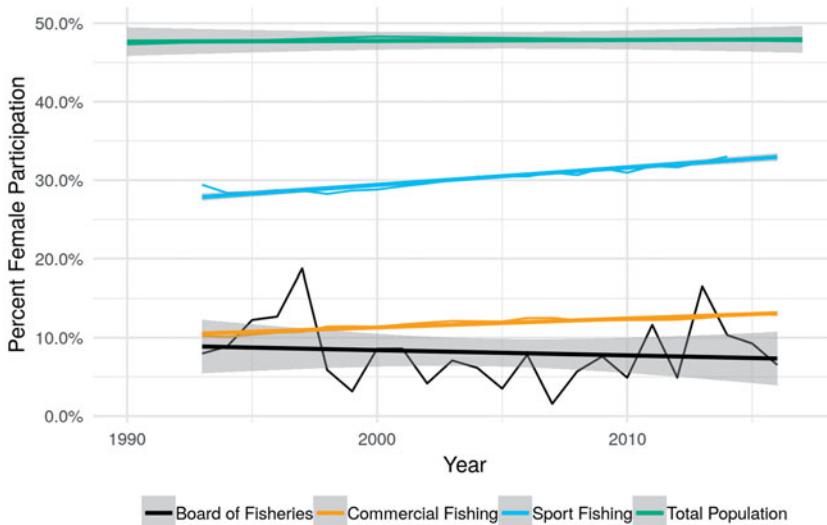
**Table 6.** Slope and confidence intervals of the percent of female participants over time.

	Slope	2.5 %	97.5 %
Board of Fisheries	-0.0007	-0.0032	0.0019
Commercial Fishing	0.0011	0.0009	0.0013
Sport Fishing	0.0022	0.0018	0.0026



**Figure 5.** The slope of participation in the Board of Fisheries proposal process, commercial fishing, and sport fishing over time.

(positive slope within 95% confidence interval). Female Board participation, however, is not significantly increasing (slope of 0 is within 95% confidence interval). We found that the increase in the percentage of female participation in commercial fishing among Alaska residents is driven not by an increase in female commercial permit holders, but rather a sharp decrease in male commercial permit holders. The increase in female participation in sport fishing, however, is driven by both an increase in the number of female sport fish license purchasers and a decrease in the number of male sport fish license purchasers. To further examine changes in women’s participation, we calculated the percentage of female participants, excluding individuals with unknown gender, in each fishing sector over years with available data against the total female population (Figure 6). For the time period we analyzed, the change in the percentage of Alaska’s female population is not significantly increasing or decreasing.



**Figure 6.** Percentage of female participation in the Board of Fisheries, commercial fishing, sport fishing, and total female population in Alaska over time.

## Discussion

Alaska's Board proposal process is dominated by state agencies and produces very low public participation and success rates. Our results indicate that significant disadvantages exist within the Board process. We will examine these disadvantages within the 3 E's framework and discuss potential causation for these results while acknowledging that more qualitative analysis is needed.

Over time, the public has played a large but relatively unsuccessful role in the Board's proposal process. The dataset clearly describes the process as more administrative than public. ADFG and the Board – the two state agencies that create and run the process – dominate in terms of proposal success rates. If the Government, Board of Fisheries, and ADFG groups are combined into a single “government” group, that group submitted 30% of the proposals over the entire Board process. Within this minority of proposals, however, is the majority of successful proposals. Government entities submitted 75% of all carried proposals. From an administrative perspective, this appears to be a highly efficient and effective process.

When you look at public participation, the process looks entirely different. Our results indicate the existence of serious barriers to diverse and inclusive public participation. If you combine Advisory Committees, Hatcheries, Businesses, Associations, Tribes/Village Councils, and Individuals into a single “public” group, that group submitted 70% of the proposals to the Board. Of successful (carried) proposals, however, only 25% originate from this public group. ACs have the highest success rates within public groups, but they still fall far behind government agencies. Although Individuals are submitting the largest number of proposals, they have the lowest success rates across the state. Associations and Tribes/Village Councils have both low participation and success rates. These numbers indicate issues with equity, efficiency, and effectiveness across the public participation component of this system.

Before we use the 3 E's to present a few key observations about this specific public process, we need to explain a few caveats to the above numbers. It is possible that a fraction of these public proposals is successful but not appearing so because they were combined into one successful ADFG proposal. When numerous similar proposals are submitted, ADFG will often combine them into a new proposal authored by ADFG. This combined ADFG proposal appears within the ADFG group in our data, hiding the successes of the other groups that contributed. It is also possible that Tribes/Village Councils are submitting proposals through other groups, such as Advisory Committees, and that participation does not appear in our dataset. Additionally, ADFG does not submit allocative proposals as a general rule. Regions and groups, such as the Arctic and ACs, that focus on fisheries management might be more successful because, unlike most of the other regions, their proposals are related to solving management problems. Finally, proposal submission is just one indicator of participation in the Board proposal process. Many individuals and groups participate in other ways, such as providing oral and written testimony and/or supporting or opposing proposals. Due to time and funding constraints, this research does not examine these alternate forms of participation; but we do believe that further analysis would be beneficial.

### **Equity**

Even though Tribes/Villages Councils may be participating in other ways, their extremely low participation rates indicate that the overall diversity of participants may be low. Due to the proposal form's lack of demographic data on race, nationality, and age, we were unable to collect more detailed information on the composition of individuals beyond their group affiliation. Without additional qualitative analysis, we can only speculate on the reasons for this low diversity; but language barriers, cultural differences, and unfamiliarity with the system could all pose challenges to public participation across Alaska.

For example, if an individual or group wants to testify before the Board, they must first turn in a blue "Public Testimony Sign Up Card" to the Board staff (Alaska Department of Fish and Game (ADFG) 2019d). If they are providing written material, they must also submit 25 copies of the material to Board staff with their blue testimony card. At the beginning of each meeting, the Board Chairman announces the length of time for testimony. Generally, each group is allowed 3–5 minutes for public testimony on Board proposals. Advisory Committees, however, are allowed 10–15 minutes. Given the relatively high AC success rates within public participation, there may be a correlation between time limits and success. The time limits certainly aid in efficiency; but effectively speaking your mind within 3–5 minutes or even 15 minutes requires practice and training. Additionally, many cultures find time restrictions on their testimony to be offensive. Certain cultural norms dictate an introduction that explains a person's identity and place before they even comment on a proposal. This introduction can consume much of the 3 minutes, giving individuals little time to explain their perspectives. Adjusting the process to account for these cultural dimensions may strengthen public participation.

Gender distribution is another indicator of low diversity within the Board proposal process. Our study of the relationship between the Board proposal dataset and Alaskan commercial and sport fishing permit ownership indicated very low rates of female

participation over time despite their rising participation in sport fishing and stabilizing commercial permit ownership (Figures 5, 6). Without qualitative analysis, it is difficult to prescribe a cause to the gender gap; but the design, accessibility, and clarity of the public process could all be contributors. A recent study of sport fish anglers commissioned by ADFG concluded that women are afraid of sounding uneducated in their fisheries knowledge and do not want to be stereotyped (Escher 2018). This fear may be limiting some female participation in the Board process, which is dominated by individuals and groups who have participated for decades. It is also possible that women do not see a role for themselves in a process dominated by male Board members. Only 4% of the Board members have been women since its inception (Clark 2017). Another limiting factor could be that fisheries professionals are commonly paid to participate. According to a recent study of U.S. fisheries professionals, these leaders are predominantly men (Arismendi and Penaluna 2016). Since most meetings last between 7 and 10 days, it is very difficult to voluntarily engage with the process if you have a job and/or a family. Considering how to make the process more accessible to groups including single parents, caregivers, and the disabled may prove beneficial to increasing overall participant diversity.

Meeting locations and Alaska's geography also combine to make a formidable barrier to inclusion. The Board process is geographically isolated from much of the state. Nearly all Board meetings take place in Cook Inlet, which also has the state's highest population and biggest city of Anchorage (Krupa et al. 2018d). Cook Inlet has many distinct rivers with high-value fisheries, numerous interest groups, and is located on the road system. The Cook Inlet stakeholders, therefore, have both the incentive and ability to participate in the Board process. This could explain the high percentage of individual submitters and overall high numbers of Cook Inlet proposals. Upper Cook Inlet is so complicated that the Board process (and stakeholders) may benefit from dividing the region into 2–3 separate meetings.

In contrast, Kotzebue has far fewer high-value fisheries, a much lower population, and is located off the road system. If you live off the road system, you rely upon a complex network of expensive transportation often dependent on the weather. Transport could include a combination of ATVs, snowmachines, chartered planes, boats, and commercial flights. The cost of sending one person who lives off the road system to a 10-day Board meeting is about \$3,000. This estimate does not include the costs of the research and preparation work that is done before the meeting. If an individual or group cannot afford these high participation costs, their chance of success plummets. It is well known that showing up at Board meetings greatly increases your odds of submitting a successful proposal (Glenn Haight, personal communication, March 29, 2019). Even if a non-Cook Inlet group can afford to attend meetings, bad weather could also prevent their meeting attendance. Since most of the state is not Cook Inlet, these factors could potentially exclude a wide geography of people. Even though it may cost the state more money with increased logistics, holding meetings across the state would likely improve regional participation and success rates.

### **Efficiency**

In Alaska's Board process, efficiency is a key concern due to the enormous volume of proposals on the same issue submitted across all of the groups. These proposals could

be identical or diametrically opposed. When a suite of proposals addressing a single issue are presented to the Board, the Board takes up the first proposal and groups the remaining proposals into No Action. That single representative proposal is either passed with significant amendments or failed. There are currently no limits on proposal submission.

No Action generally implies that (1) the Board does not have the authority to deal with a proposal, or (2) that the proposal already exists in the agenda (i.e., repeat proposal). According to the Board's Executive Director Glenn Haight, at least 50% of No Action proposals fall into the second category (Glenn Haight, personal communication, March 29, 2019), indicating that the open submission process is vulnerable to inefficiencies created by similar proposals (Table 2). Each proposal on a similar issue increases the workload of Board staff and members and provides little to no benefit in the overall regulatory process. It's possible that similar proposals, which largely originate from Cook Inlet stakeholders, are making it difficult for the Board and the staff to work on other regions. Stakeholders from other regions could then suffer from inequity because Cook Inlet issues could dominate their regional meetings with out of cycle proposals. The dataset shows that an "open process" might not be a clear indicator of success, at least related to equity, efficiency, and even effectiveness. Limiting the number of similar (and failed) proposals, especially over time, appears to be desperately needed.

### ***Effectiveness***

Similar issue proposals not only occur within each cycle, they occur (and often fail) across decades. The amount of time and resources that these proposals have consumed would shock outsiders but come as no surprise to veterans of the process. If a stakeholder process is bogged down with similar issue proposals, most of which consistently fail over time, then that process is not as effective as it could be. It is possible that in order to be equitable, efficient, and effective, open processes need limits to actually remain open in terms of the 3 Es. One idea would be for the Board to only accept repeat proposals if the submitter can document that new circumstances warrant additional review.

The number of similar issue and repeat proposals could also indicate a much bigger problem. Stakeholders may just be waiting for the right political atmosphere (e.g., the Board composition) to get their proposal passed. As the Board members switch out with each new governor or term limit, groups submit the same proposal, hoping for a winning atmosphere. The dataset could be used to show whether Board votes on specific issues have varied over time. Further coding of the proposals could even reveal whether ADFG has switched its position on issues by tracking the agency's position on specific proposals. While many participants recognize the Board process as "political" science, ADFG and the Board have asserted that their decisions are grounded in biological and social science. Further analysis of the dataset in combination with qualitative surveys of Board members and participants could shed light on the actual use of biological and social science in Board decision-making.

Participation rates are another factor that could reduce effectiveness. Our study of participation rates over time show an overall decline of proposal submissions (Figure 5

and 6). We speculate that two main factors could produce this overall decline: (1) retirement/deaths; and (2) frustration with the process. While we have not conducted a quantitative analysis of individual name frequency, qualitative assessment (particularly of the Cook Inlet region) indicates that the majority of individual proposals originated from a relatively small group of people who have actively participated since the process began. As members of this group die, the overall number of proposals has decreased. If new participants are not joining, the process risks becoming irrelevant.

It is also possible that groups are growing frustrated with either the actual process or their failures and have simply stopped participating. Successful participation in the Board process requires dedication and commitment. Submitting a strong proposal requires doing adequate research and gaining support through meeting attendance and public testimony. After having proposals continuously fail over decades, it is entirely possible that certain individuals or groups have called it quits. The decline of business proposals, such as those submitted by seafood processors in Southeast Alaska, may demonstrate abandonment of the process. Businesses may have decided the process was not worth their time and redirected their effort into lobbying or other more effective means.

The Board may have also solved the problem concerning stakeholders. After decades of stakeholder participation, the Board process has created very complicated allocation plans. It is possible that groups are just trying to work around the edges of these plans in an attempt to increase their allocation. Whatever the reason, Board participation is clearly decreasing, and the current process appears unsustainable. Trainings could help to recruit new participants; but a modernization and adaptation of the process might be needed to expand participation.

An adapted process might also help to address one of the more concerning issues impacting Board effectiveness – the worsening of conflict. The Board proposal process appears to heighten conflict within contentious fisheries as groups grow frustrated with their failures and interactions with opposing sides. One example of this conflict can be found in Cook Inlet, a region notorious for its active and aggressive Board participation. Instead of demonstrating the advantages of stakeholder engagement, Cook Inlet demonstrates what happens when the commercial and sport fishing communities increasingly distrust each other, and Board-generated conflict escalates into court battles. The highest number of proposal submissions with the lowest success rates is seen in Cook Inlet. Many grievances that first appeared as failed Board proposals have ended up in the court system (e.g., ADN 2014, ADN 2015). The frequency of Cook Inlet fisheries court cases indicates that the Board process is not helping to resolve allocation issues – in at least one of Alaska's regions. In fact, the Board process may unintentionally worsen conflict.

Given the Cook Inlet scenario, it is possible that one stakeholder engagement approach does not fit all. In highly contentious fisheries with fierce allocative struggles, stakeholder engagement may need to consider a drastically different approach with much different objectives. As mandated by their regulatory framework, any change to the Board process requires the cooperation of the Joint Boards of Fisheries and Game. Since the Boards likely have different experiences and outcomes, this could be difficult to achieve. Another factor that complicates a redesign is the regularly occurring

turnover of Board members. Despite these challenges, the Board and ADFG would greatly benefit from a thoughtful consideration of these findings because in addition to creating a more equitable and sustainable process, it could make their jobs easier.

Achieving the 3 E's could prove problematic when they contradict each other. For example, if the public is given more time to comment on proposals, this could impact the overall efficiency of the process. These concerns could be addressed by specifying the objectives to create a balance between competing needs. Then the existing and potential advantages and disadvantages can be monitored.

While we focused on the disadvantages of the Board process in this paper, advantages do exist. When compared to other public groups, the Advisory Committees appear to be functioning as well as they can within the current system. Regions with fewer stakeholders and less contentious fisheries have relatively high success rates for non-state entities. Major fisheries management issues have been resolved through the Board process. These glimmers of hope allow us to envision what the process could become in the future.

## Conclusions

The future is rocky and strewn with bureaucratic mountains but not impossible to navigate. The first step is admitting that there is a problem. This proposal dataset shows that skewed or nonexistent definitions of success may be hiding the disadvantages that exist within stakeholder engagement processes. Agencies would benefit from defining success through a clear framework of goals and objectives prior to engaging stakeholders. The dataset also suggests that an open public process is not always inherently good. Serious issues with equity, efficiency, and effectiveness can and do exist. The evidence provided in this paper is a strong indicator that stakeholder engagement could potentially be causing harm through a number of actions, such as (1) reinforcing institutional biases that stifle diversity and inclusion, (2) encouraging repetitive and failing proposals that lead to declining participation, and (3) worsening stakeholder conflict.

Once the problem is acknowledged, qualitative and quantitative analyses can build a strong and sustainable foundation for the 3 E's of stakeholder engagement. As analytic efforts like this one move forward, we encourage managers to collect and collate relevant demographic data in their stakeholder engagement processes. These data are essential to understanding how public processes function. As more approaches to analysis are revealed, we also encourage researchers to provide accessible datasets with transparent methods. In addition to producing the technical datasets, it may be beneficial to build apps, such as R Shiny, that allow more people to interact with the data. Conducting additional qualitative analyses may help to further explain the results and aid managers and participants in the restructuring of stakeholder engagement processes.

While we focused on a single case study, we believe that further investigation into other stakeholder engagement processes may reveal a global need for increased accountability. Until success is defined and the processes are assessed, claims of success or failure have the potential to aggravate already contentious natural resource issues. It is easy to dismiss some processes as failures and celebrate others as successes, but the truth is that both management and the public increasingly need more equitable, efficient, and

effective stakeholder engagement. By adjusting and modernizing our approaches, we can work toward enacting transparent and accountable public processes that produce the advantages commonly associated with their success.

## Acknowledgments

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# Matanuska-Susitna Borough



January 10, 2020

Alaska Board of Fisheries Members - *Via Fax to 907-465-6094*

**Re: Matanuska-Susitna Borough Manager Comments for Consideration  
Board of Fisheries Kodiak Finfish Meeting January 11-14, 2020**

Dear Members of the Alaska Board of Fisheries,

I am writing in support of efforts to address Kodiak's mixed stock salmon fishery. The Matanuska-Susitna Borough Fish and Wildlife Commission has been dealing with the decline of Chinook and Sockeye returns in the rivers of Cook Inlet for decades. The low returns of all species of salmon, particularly Chinook and Sockeye salmon, have forced the Alaska Department of Fish and Game to declare eight northern Cook Inlet stocks as Stocks of Concern out of 16 Stocks of Concern statewide.

Our Mat-Su Borough Fish and Wildlife Commission has advocated for years to use genetics studies to guide reasonable management by ADFG to return Chinook and sockeye salmon to their natal streams. The economic impact of salmon returning to the Mat-Su Borough has been significant. We ask that the Board consider the impacts to communities like Chignik and others in the Mat-Su Borough where the impact of low salmon returns on livelihoods and economies have been severe. However, the source of the problem reaches beyond Northern Cook Inlet, including the interception of fish trying to return to their natal streams.

In past decades the Kodiak seine fleet has changed dramatically. The ships are much larger and they have developed very effective fishing techniques and gear that can harvest many more fish than their traditional methods. They can now navigate beyond the capes and into the straits, thus intercepting fish destined for rearing grounds elsewhere.

We urge BOF members to look at genetics and consider the impacts on local fisheries and economies like Chignik and the Susitna rivers, and take actions that rebuild our dwindling stocks and economy in Northern Cook Inlet.

Proposals such as 58 and 60 are addressing these very issues, as are proposals 63, 64, 65, and 66. I ask that the Alaska Board of Fisheries give their serious consideration and support for these proposals.

The Matanuska-Susitna Borough thanks you for your service.

Sincerely,

  
John M. Moosey  
Borough Manager



# An Overview of the Alaska Board of Fisheries

House Fisheries Committee

March 10, 2015



Glenn Haight, Executive Director, Alaska Board of Fisheries  
Boards Support Section, Alaska Dept. Fish and Game  
907-465-4110  
[glenn.haight@alaska.gov](mailto:glenn.haight@alaska.gov)



# Outline

- Purpose and composition of Board
- Steps in board process
- Input on board decisions
  - Public
  - Agency
- Legal and policy input in board decisions
  - Statutes and regulations
  - Policies and findings





# Board Structure

- Three Boards

Game

Conservation and development of game resources

Fisheries

Conservation and development of fisheries resources

Joint Board

Subsistence areas, advisory committees, board process



# Board Purpose

- Established for the purpose of conservation and development – AS 16.05.221



2013 Joint Board Meeting, Board of Fish (F) and Game (G) members from left to right: Bob Mumford (G), Orville Huntington (F), Reed Morisky (F), Sue Jeffrey (F), Tom Kluberton (F), John Jensen (F), Karl Johnstone (F), Nick Yurko (G), Ted Spraker (G), Teresa Sager Albaugh (G), Stosh Hoffman (G), Fritz Johnson (F), Nick Probasco (G). Not pictured: Nate Turner (G).



# Board Purpose

- Duties include – AS 16.05.251
  - Creation of reserves, refuges, sanctuaries
  - Open/closed seasons
  - Set quotas, bag limits, harvest levels
  - Means and methods of capture
  - Markings and id requirements for means used in pursuit
  - Classifying fisheries (sport, commercial, subsistence, personal use)
  - Habitat improvements/protection





## Board Purpose (cont.)

- Duties include – AS 16.05.251
  - Analyzing and controlling disease, predation
  - Regulating transport/protection of native or exotic fish
  - Harvest of aquatic plants
  - Rules around licenses, permits
  - Use of observers
  - Establishing exclusive use areas
  - Reporting requirements of unlicensed vessels
  - Promoting fishing/preserving fishing heritage





# Board Composition

- 7-members – appointed by Governor, confirmed by full Legislature
- Members shall be appointed on the basis of –
  - “interest in public affairs, good judgment, knowledge, and ability in the field of action of the board, and with a view to providing diversity of interest and points of view in the membership.”

## 2014/2015 Board members (currently 6)

Tom Kluberton, Chair, Talkeetna

John Jensen, Vice-Chair, Petersburg

Orville Huntington, Huslia

Sue Jeffrey, Kodiak

Reed Morisky, Fairbanks

Fritz Johnson, Dillingham





# Proposal Process

- Call for Proposals
- Distribution of Proposals
- Public Review and Comment
- Board Regulatory Meeting
- Implementation





# Proposal Form

- Typically due April 10 of each year.
- Up to 300 – 400 proposals a year.

ALASKA BOARD OF FISHERIES  
REGULATION PROPOSAL FORM 2014-2015  
PO BOX 115526, JUNEAU, ALASKA 99811-5526

*\*Indicates a required field*

BOARD OF FISHERIES REGULATIONS	
<input type="checkbox"/> Subsistence	<input type="checkbox"/> Personal Use
<input type="checkbox"/> Sport	<input type="checkbox"/> Commercial
<p><b>*Which meeting would you like to submit your proposal to?</b></p> <p><input type="checkbox"/> Prince William Sound and Upper Copper/Upper Susitna Finfish</p> <p><input type="checkbox"/> Southeast and Yakutat Crab, Shrimp, Misc. Shellfish (including Dungeness, King and Tanner)</p> <p><input type="checkbox"/> Southeast and Yakutat Finfish (including salmon, herring, groundfish)</p> <p><input type="checkbox"/> Statewide Dungeness Crab, Shrimp, Misc. Shellfish (except Southeast and Yakutat) and Supplemental Issues</p>	
<p>Please answer all questions to the best of your ability. All answers will be printed in the proposal book along with the proposer's name (address and phone numbers will not be published). Use separate forms for each proposal. Address only one issue per proposal. State the issue clearly and concisely. The board will reject multiple or confusing items.</p>	
<p>1. Alaska Administrative Code Number 5 AAC _____</p>	
<p>*2. What is the issue you would like the board to address and why?</p>	
<p>*3. What solution do you recommend? In other words, if the board adopted your solution, what would the new regulation say? (Please provide draft regulatory language, if possible.)</p>	

\*Submitted By: \_\_\_\_\_  
Individual or Group

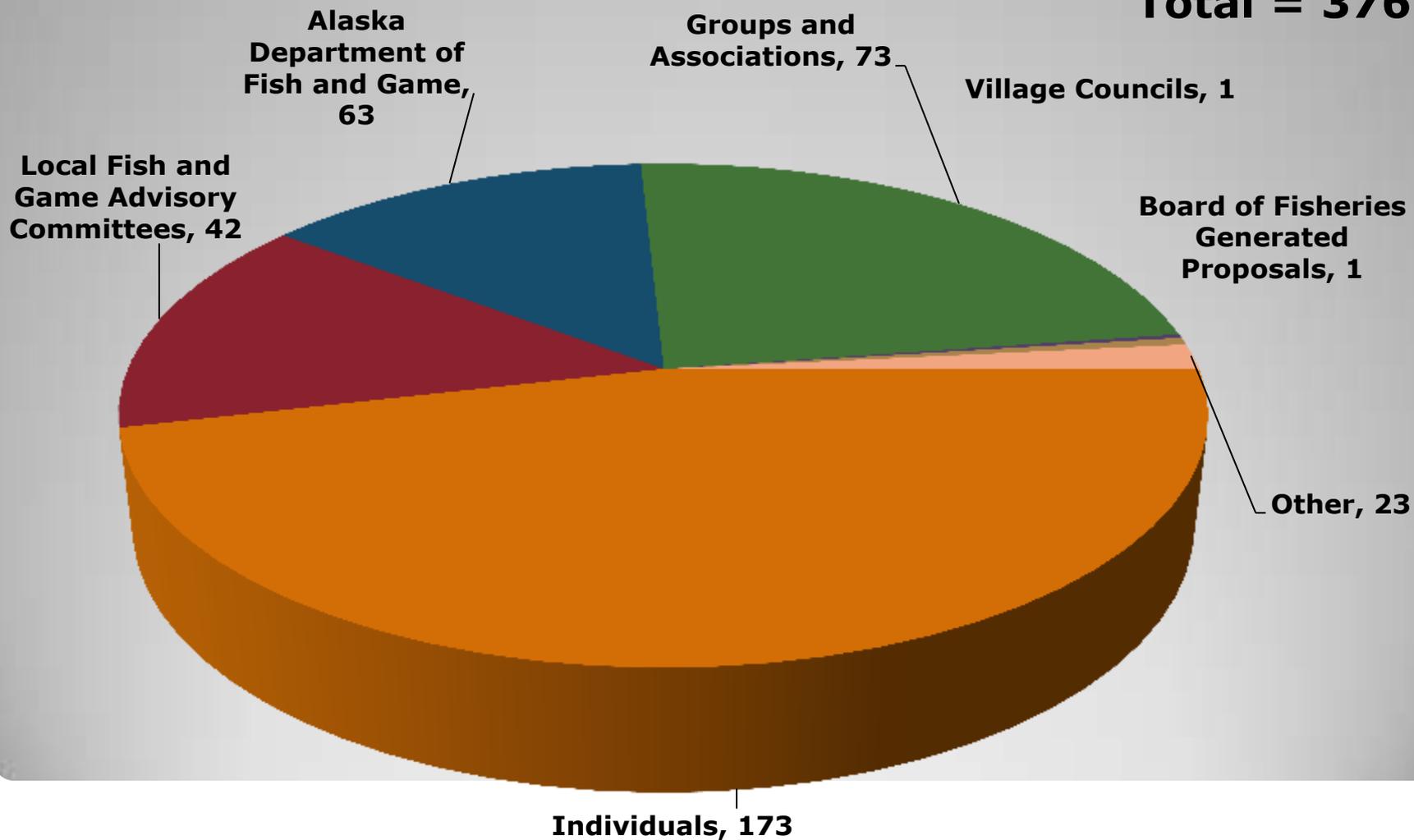
\*Address \_\_\_\_\_ \*City, State \_\_\_\_\_ \*ZIP Code \_\_\_\_\_

\*Home Phone \_\_\_\_\_ \*Work Phone \_\_\_\_\_ \*Email \_\_\_\_\_



# 2013/2014 Sources of Proposals

**Total = 376**





# Board of Fisheries Meeting Cycle

- 2014/2015 (2017/2018, 2020/2021 ...)
  - Prince William Sound finfish, Southeast and Yakutat finfish and crab, Statewide Dungeness and other shellfish
- 2015-2016 (2018/2019, 2021/2022 ...)
  - Alaska Peninsula/Aleutian Islands/Chignik, Arctic/Yukon/Kuskokwim, Bristol Bay, and Statewide finfish
- 2016/2017 (2019/2020, 2022/2023 ...)
  - Lower and Upper Cook Inlet, and Kodiak finfish, and Statewide King and Tanner Crab



# The Typical Meeting



- Introductions, ethics disclosures



- Department Staff Reports



- Public Testimony



- Committees (small and COTW)



- Deliberations



- Miscellaneous Business

*All elements of building a clear record*

\* board findings #2000-200-FB and #2000-199-FB describe committee process



# Sources of Public Input

- General public
- Industry, associations
- Local, state, federal governments
- Tribal governments and village councils
- Legislators
- Fish and Game Advisory Committees (84 statewide)





# Local Fish and Game Advisory Committees

## Southeast (23 advisory committees)

Angoon•Craig•East Prince of Wales Island•Edna Bay•Elfin Cove•Hydaburg•Hyder•Icy Straits•Juneau-Douglas•Kake  
•Ketchikan•Klawock• Klukwan•Pelican•Petersburg•Port Alexander•Saxman•Sitka•Sumner Strait•Tenakee Springs•Upper Lynn  
Canal•Wrangell•Yakutat

## Southcentral (19 advisory committees)

Anchorage•Central Peninsula • Cooper Landing•Copper Basin•Copper River/Prince William  
Sound•Denali•Homer•Kenai/Soldotna•Matanuska Valley•Mt. Yenlo•Paxson•Prince William Sound/Valdez•Seldovia•Seward•Susitna  
Valley •Tok Cutoff/Nabesna Road•Tyonek•Whittier

## Southwest (12 advisory committees)

•Chignik•False Pass•King Cove•Kodiak•Lake Iliamna•Lower Bristol Bay•  
Naknek/Kvichak•Nelson Lagoon•Nushagak•Sand Point•Togiak•Unalaska/Dutch Harbor

## Interior (15 advisory committees)

Central•Delta•Eagle•Fairbanks•Grayling, Anvik, Shageluk and Holy Cross  
(G.A.S.H.)•Koyukuk•Lake Minchumina•McGrath•Middle Nenana River•Middle Yukon  
River•Minto/Nenana•Ruby•Tanana/Rampart/Manly•Upper Tanana/Forty Mile•Yukon Flats

## Arctic (9 advisory committees)

•Kotzebue•Lower Kobuk•Noatak/Kivalina•Northern Norton Sound•Northern Seward  
Peninsula•North Slope•St Lawrence Island•Southern Norton Sound•Upper Kobuk

## Western (7 advisory committees)

Bethel•Central Bering Sea•Central Kuskokwim•Coastal Lower Yukon•Lower  
Kuskokwim•Mid-Lower Yukon•Stony-Holitna

## Alaska's 84 Advisory Committees





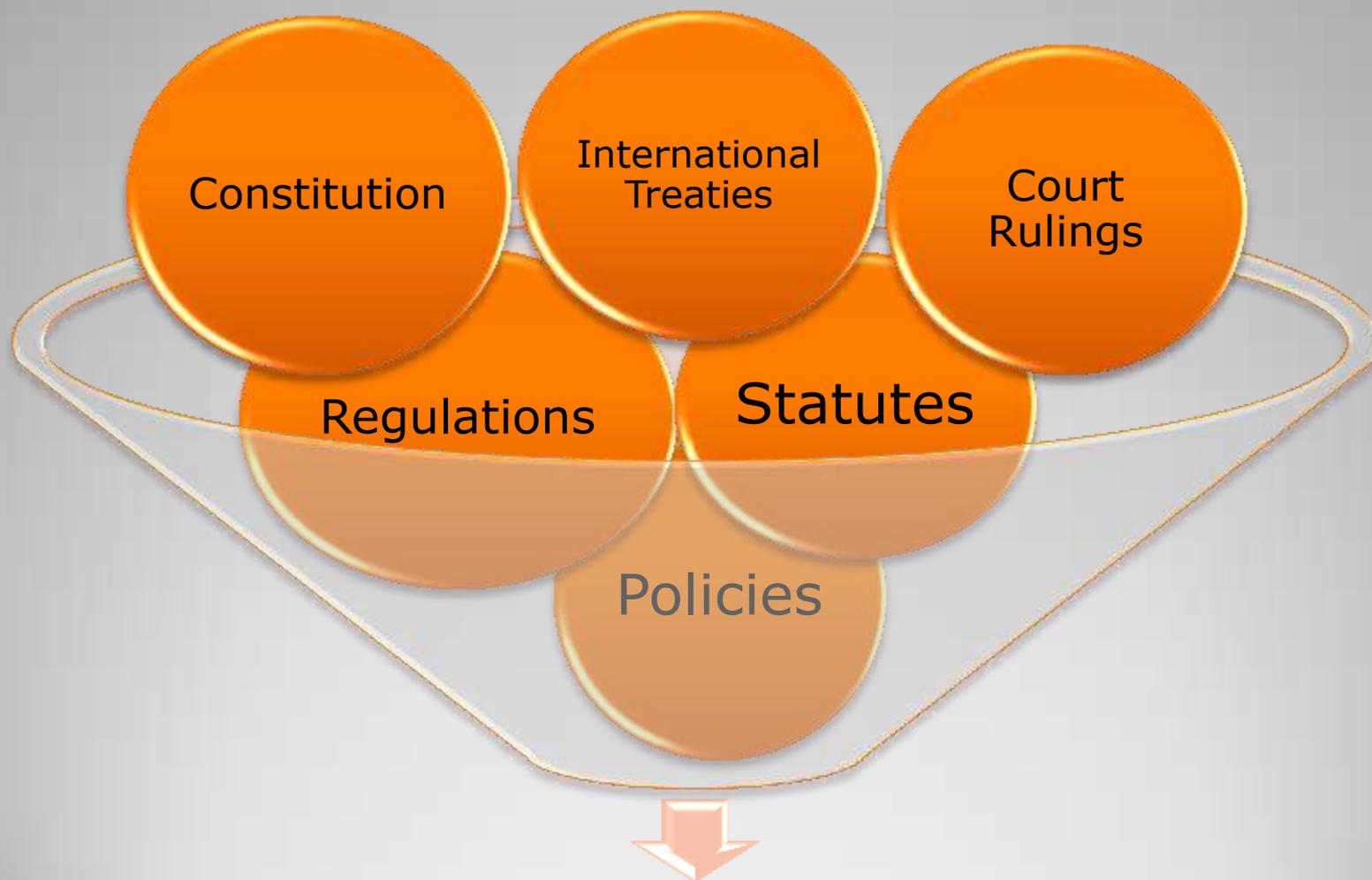
# Agency Input

- Alaska Dept. of Fish & Game
- Dept. of Law
- Dept. Public Safety/Alaska Wildlife Troopers
- Commercial Fisheries Entry Commission
- North Pacific Fishery Management Council  
(federal)
- Office of Subsistence Management (federal)





# Legal Framework for Decisions



**Board Decisions**



# Alaska Constitution

## Article 8, Section 4

*“Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses”*

(Article 8, Section 4)



# Alaska Statutes

- Board of Fisheries Authority (AS 16.05.221; AS 16.05.251)

## “Conservation and Development”

- Powers and Duties of the Commissioner (AS 16.05.050)
- Alaska Administrative Procedures Act (AS 44.62)
- Open Meetings Act (AS 44.62.310)
- Executive Branch Ethics Act (AS 39.52)





# More Alaska Statutes

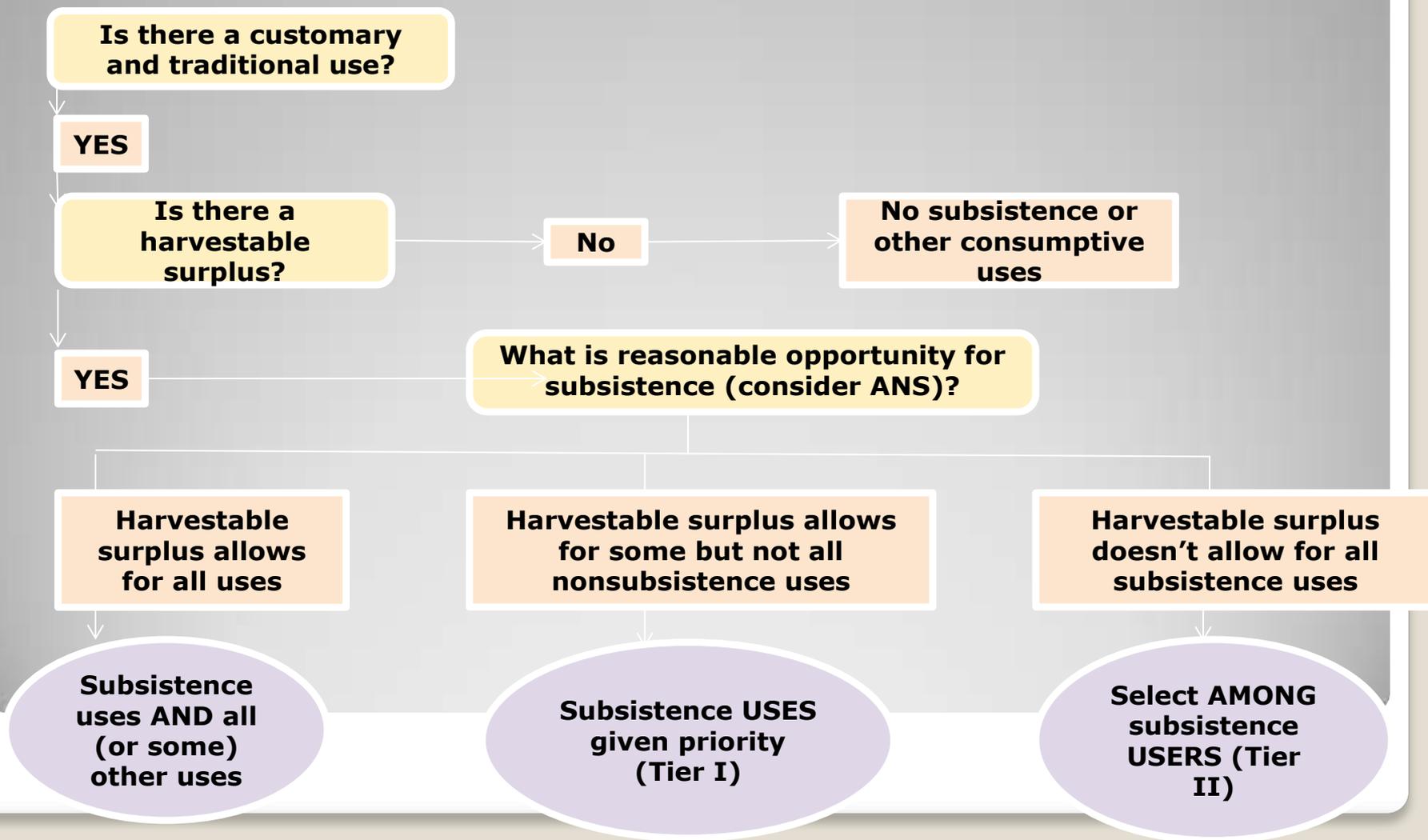
- Allocation Criteria (AS 16.05.251(e) and #91-129-FB)
  - history of each fishery
  - number of participants
  - importance for personal and family consumption
  - availability of alternative resources
  - importance in local, regional, and state economy
  - importance for providing recreational opportunity
- Management of Wild and Enhanced Stocks (AS 16.05.730)
- State Subsistence Law (AS 16.05.258)





# Subsistence Determinations

- Steps when reviewing subsistence regulations





## Board Regulations and Policies

- Sustainable Salmon Fisheries Policy (5 AAC 39.222)
- Escapement Goal Policy (5 AAC 39.223)
- Mixed Stock Salmon Fisheries (5 AAC 39.220 and #93-145-FB)
- Emerging Fisheries (5 AAC 39.210)



see list of all board findings at

<http://www.boards.adfg.state.ak.us/fishinfo/regs/pfindx.php>



## Procedures for Out-of-Cycle Actions

- Board of Fisheries Agenda Change Request
- Joint Board Emergency Petition Policy
- Subsistence Proposal Policy
- Category 2 measures in BS/AI King/Tanner Crab Fishery



# Getting Involved

- Board's email list
- Written comments on proposals
- Proposal submission
- Attend Board meetings and present testimony
- Join or attend your local F&G advisory committee
- Join an industry or stakeholder group



# Thank You



# Questions

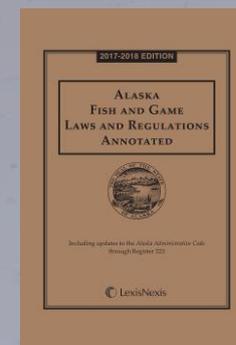
# Alaska Department of Fish and Game Boards Support Training

## Understanding and Influencing Your Fish and Game Regulatory Process



# The Order of Things in Law

- Constitution – written at statehood. Amended only with significant public interest.
- Statutes - written by legislature.
- Regulations – written by agencies to implement statutes.



# The Order of Things in Law

## Alaska Constitution, Article VIII



- ⌘ Gives authority to legislature, to provide for utilization, development, and conservation of natural resources belonging to State, for maximum benefit of people § 2.
- ⌘ Policy of maximum use of resources consistent with public interest § 1
- ⌘ Fish, wildlife reserved to the people for common use § 3.
- ⌘ Fish, wildlife utilized on sustained yield principle, subject to preferences among beneficial uses § 4.
- ⌘ No exclusive right or special privilege of fishery, but some limited entry ok for specific purposes § 15.
- ⌘ Laws governing natural resources shall apply equally to all persons similarly situated § 17.

# Alaska Statutes (cont.)

- Allocation Criteria (AS 16.05.251(e) and #91-129-FB), including -
  - history of each fishery
  - number of participants
  - importance for personal and family consumption
  - availability of alternative resources
  - importance in local, regional, and state economy
  - importance for providing recreational opportunity
- State Subsistence Law (AS 16.05.258)



# Getting Involved

- Get on Board's mailing list.
- Submit a proposal(s).
- Submit comments on proposals.
- Attend Board meetings and present testimony.
- Join or attend your local fish and game advisory committee.
- Join an industry or stakeholder group.
- Apply for a board position.



Photo credit: Robert Woosley/KCAW

# Before a Board Meeting

- Review online proposal book - starting in August.
- Check board website for available research – 2 weeks from a meeting.
- Submit written public comment – 2 weeks prior to meeting.
- Review advisory committee, staff, and other public comment – Index of Comments.

The screenshot displays the Alaska Department of Fish and Game website. The main content area is titled "Alaska Board of Game Meeting Information". It features a search bar with filters for "All Years", "All Meeting Locations", and "All Subjects". Below the search bar, a note states: "Note: This search will only return meetings that have been added to the website. Older meetings are unavailable online. Documents and audio recordings pertaining to each individual meeting can be found at the meeting link." The page lists the "Board of Game Teleconference - Monday November 23, 2016" with on-time comments due at 5:00 p.m. on Tuesday, November 22, 2016. It includes sections for "Summary of Actions" (Meeting Summary), "Meeting Documents" (Notice, Agenda, Agenda Change Requests, ACRs 10-12, On-time Advisory Committee Comments, On-time Public Comments), "Board Documents" (Board Roster, Agenda Change Request Policy, Filing 2013-34-JB), and "Department Reports" (ADF&G Comments on ACR 10, 11, and 12). A "Meeting Audio" section includes a link to open a player that requires Adobe Flash. The footer contains social media links for Facebook, Vimeo, and YouTube, along with contact information for the Alaska Department of Fish and Game.

# How Board Meeting Goes

## Typical agenda for board meetings -

- Introductions.
- Ethics disclosures.
- ADF&G staff reports.
- Oral public testimony (up to two days).
- Committee of the Whole or committees (for Board of Fisheries).
- Deliberation on proposals.
- Miscellaneous business.



# Summary

- Structured process.
- Credibility critical.
- High level of public participation.
- Public comment critical for decision making process.





# Contact Us

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