Submitted to DCTF project team on 2/16/10

These are my personal comments and observations regarding Dungeness crab management, they are not the views of the Crescent City Harbor District or the California Association of Harbormasters. I offer these comments regarding the commercial side of the fishery to help advance the ongoing discussion about improving Dungeness crab management in California. I am not advocating particular management measures, just responding to what we have collectively learned over the past few months, and to what seems to be popular with other members of the DCTF. Given that, here are my comments,

Glad to be a part of this process

- We have learned a LOT
- Come a lot farther toward agreement than many thought possible.
- Have the tools and information to think seriously about management of the crab fishery.

If you are going to have management, you must have goals.

- Even if they are not stated, every management regime has implicit goals.
- For example, the current Dungeness crab management regime has a goal of preserving biological productivity, and ignores the economic value of the fishery and safety of the participants.

Goals are even more important for adaptive management. It is bad enough if we have a constant management regime with unstated goals, but at least people can adjust to the constant management regime and plan accordingly. If, however, management is constantly changing (adapting) without clear goals, then it is changing in an unpredictable and inconstant way, perhaps according to the whims of whatever managers happen to be in power at the moment. How do you adapt to that?

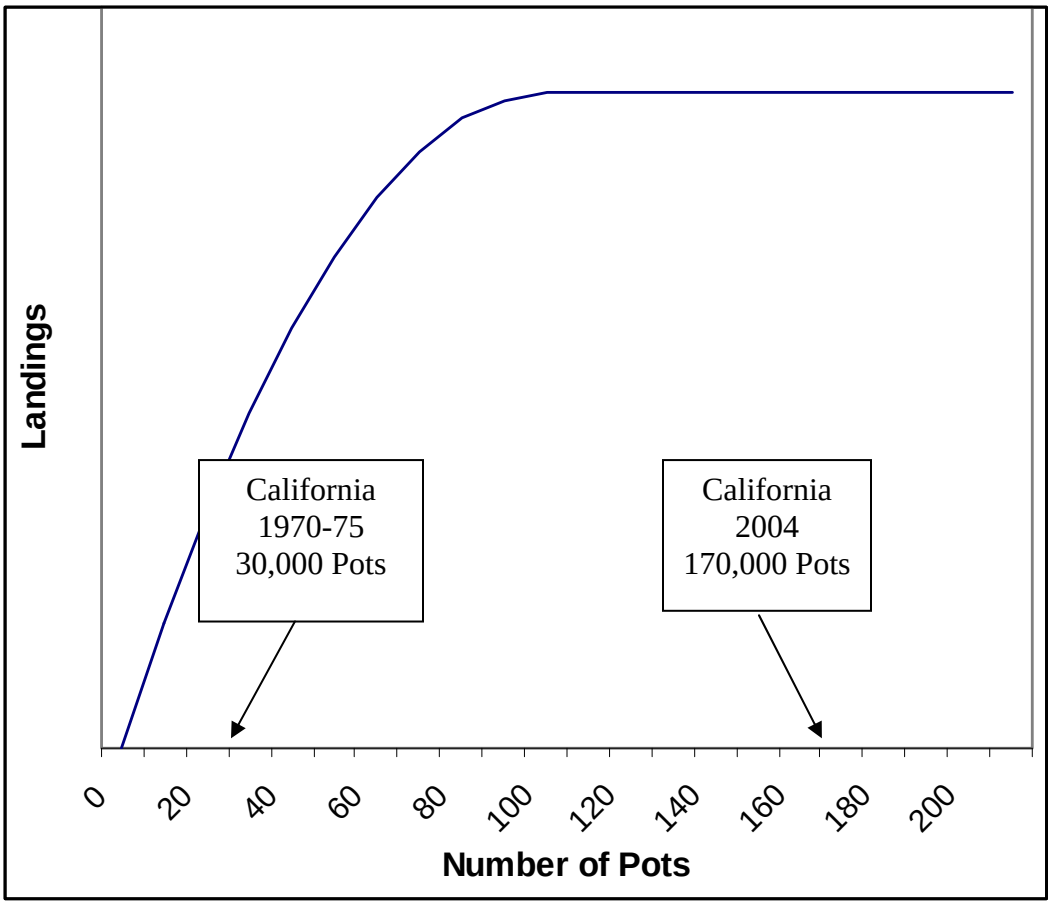
Johanna Thomas and Maggie Ostdahl have provided a good guide to how goals and objectives affect the choice of tools for management.

- We should pay special attention to their diagram Figure 1, Landings as a function of effort (traps).
- It shows how at relatively low levels of traps, more traps catch more crabs. As more and more traps are added to the industry, landings level out. At very high levels of traps, more traps may even decrease landings due to waste and bycatch mortality.

<u>Actual numbers of traps</u>
Dewees Presentation 10/21/2009

- 1970-75 PSFMC estimates 30,000 traps in California
- Also **<u>estimates total economic benefits maximum at 60,000 traps in CA-OR-WA</u>**

- Early 2000s Dewees et al estimate 170,000 traps in California
- PSFMC estimates 375,000 traps coastwide



That we are sometimes on the right hand side of this diagram is evident from the experience of both Oregon and Washington. They implemented pot limits, with little or no effect on landings. They were far to the right before pot limits, and they were (less far, but) still too far to the right after pot limits.

The problem of too much gear in the water is clear –especially to those in the industry.

What to do about it?

Have multiple proposals for pot limits. Need to evaluate them on basis of

* Equity – Is it fair?
* Efficiency –will it accomplish the goal? At what cost?

Two separate issues

- Initial Allocation

- Long term operation

Initial allocation is always difficult.

- It is hard to be "fair", there are always windfall profits and losses.
- Tendency is for politics to require more generosity than is justified by pure economic concerns.
    - Currently estimate 170,000+ traps in California waters
    - Initial allocations in proposals range 115,000-192,000
    - We are not contemplating much reduction.
- May be able to structure ways for "winners" to compensate "losers".
- Base criteria on landings, that's the outcome everyone is interested in. (As compared to boat size etc.)
- More gradations are better than few…see Tommy Ancona's argument.
- May want to divide areas because abundance differs.
    - Long term average about 1/3 of value from D10, 2/3 from North.

After the initial allocation and the system is in long term operation, there are other concerns,

- Because initial allocation is probably too generous, need to provide a mechanism for reducing effort over time
- Want to allow buying/selling to allow entry and exit from industry
- Provide a reasonable path for entry to the fishery.
- Allow people to adjust the number of pots to their business operation, --one size does not fit all.

Why do we need tiered pot limits? Couldn't we just require that only pots with valid trap tags be possessed or used in the fishery? Why do we care that different people have different numbers of tags?

- From an enforcement viewpoint, are they ever going to get all a permit holders pots in one place and count them? Probably not, they are just going to check to see if they have valid trap tags.
- Could require that people have a license, then allow them to buy trap tags from a limited pool to go crab fishing.

For example, suppose there is

- A pool of 100,000 trap tags in California (after the initial allocation and the reduction method have operated for a while).
- A maximum of 500 tags that can be fished on any boat.

Then individual fishermen could acquire tags as they wanted to go fishing.

- Large scale fishermen may have 500 tags.
- Small scale fishermen may be content with 100 or 150 tags.

- Crewman could buy a few tags and then negotiate to fish them on a boat with less than 500 tags as a way of entering the industry.

I am not advocating the following plan, but just illustrating one way of addressing some of the issues raised above. This proposal is based on the ideas put forward in other pot limit proposals and is meant to spark discussion, it is not meant as a final product. There are many additional issues that need to be addressed before any proposal is final. The numbers in this proposal are for discussion only –they can be changed.

Initial Allocation

Each inactive permit gets 100 pot tags. Total pot tags, 141 x 100 = 14,100.

For active permits,

- Choose a window period of 3-5 years.
- Allow every active fisherman to choose one year from the window period.
- Rank all permits by their landings from the chosen year, from lowest to highest.
- The lowest active permit gets 104 pot tags. The second lowest permit gets 105 pot tags. Third lowest gets 106 tags. Continue through all 447 active tags until the highest ranked permit gets 550 pot tags.
- This will result in 146,169 tags issued to active permits.

Total pot tags in the initial allocation

Inactive	14,100
Active	146,169
	160,269

Which is about where we were in 2004, and is in the mid range of proposals from others.

Ongoing Operation

Anyone owning a valid California Dungeness crab permit can own trap tags up to the legal limit.

May be several permits per boat, but the total number of trap tags fished on the boat cannot exceed the legal limit.

The legal limit may be less than the initial allocation, with the initial participants "grandfathered" in.

New participants can accumulate trap tags while fishing on someone else's boat, so long as the combined total trap tags on that boat do not exceed the legal limit.

If a reduction in total pots is desired, say to 100,000, then the trap tags issued to every permittee could be reduced by a percentage each year.

For example, suppose the industry decided to reduce trap tags by 5% per year.

- Then, the permittee who received 500 trap tags last year, would only receive 475 trap tags this year. The person who received 200 trap tags last year would receive 190 tags this year. And the person who received 100 tags last year, only receives 95 tags this year.
- The key is that everyone loses the same percentage of traps each year.
- People who want to fish more pots than their permit allows can purchase additional trap tags from inactive permits or from those who are exiting the industry, so long as they don't exceed the legal limit.

The legal limit may, or may not, be reduced by the same percentage each year.

In this example, time to reduce from about 160,000 traps to 100,000 traps is

16 years at 3% per year
10 years at 5% per year
5 years at 10% per year

Richard Young
richard@ccharbor.com