Pacific Halibut Management

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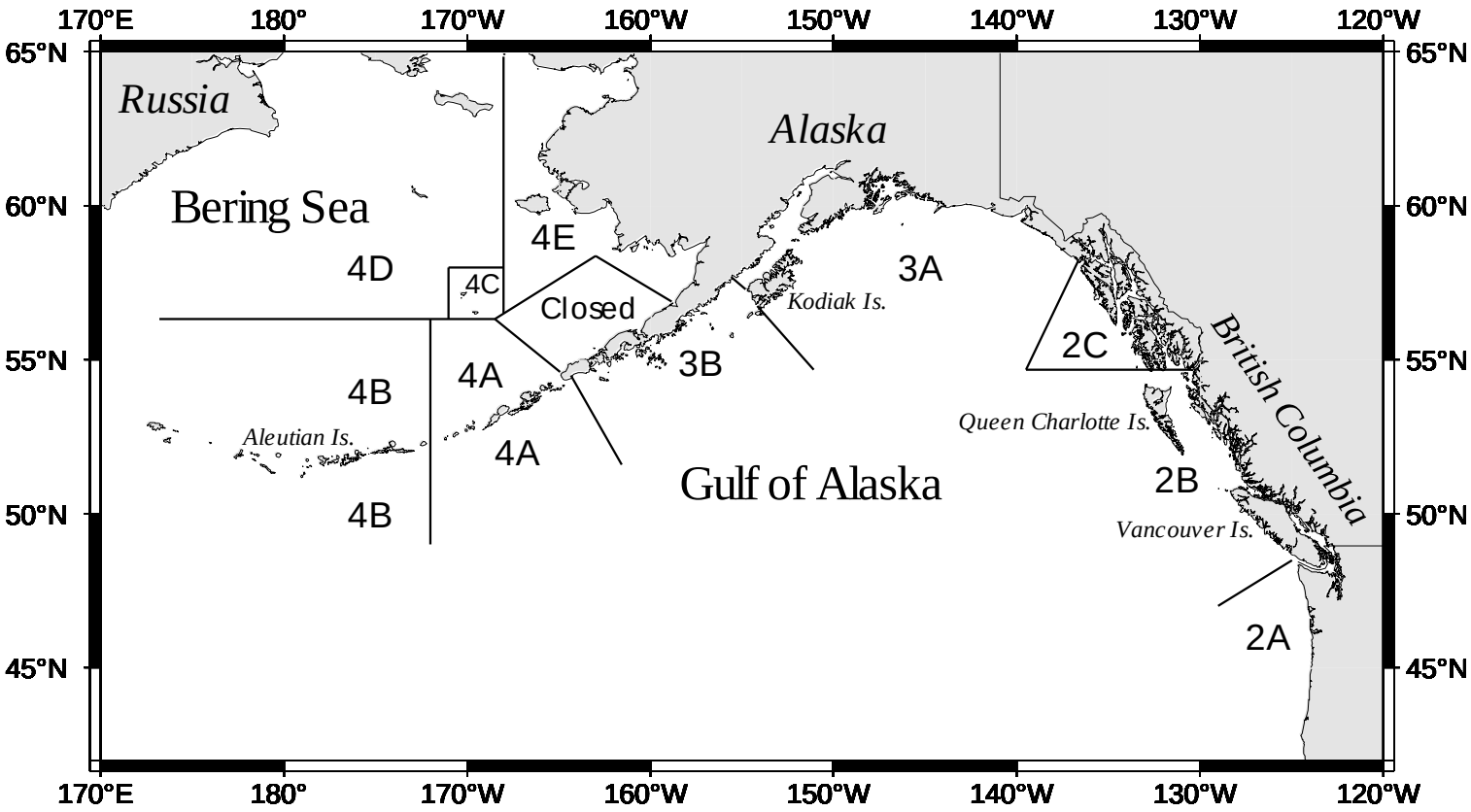
Overview of talk

1. Development of Pacific halibut management
2. Agency roles and involvement
3. Area 2A sport fishery management
4. IPHC stock management
5. Management Strategy Evaluation (MSE) and the Management Strategy Advisory Board (MSAB)
6. IPHC assessment survey
7. South of Humbug Mtn. management

Development of Pacific halibut management

- Who is the IPHC?
  - Early 1900s: Fishing industry petitioned the two governments seeking conservation and regulation
  - 1923: Treaty between Canada and the United States
  - IPHC - Overarching responsibility for Pacific halibut in the North Pacific
  - Jurisdiction extends to all waters off US and Canadian coasts where the national parties exercise exclusive fisheries jurisdiction, wherever halibut are found
    - 0-200 nm
- As a consequence of being managed by an international treaty organization, any domestic (i.e., internal) halibut management is a federal responsibility

IPHC Regulatory Areas



Agency roles and involvement

- IPHC has overarching management authority and responsibility
- IPHC's 'charge' is preservation of the fishery and resource (treaty language)
- IPHC: responsible for conservation ("size of the pie")
  - Limitations on catch by area
- Federal agencies: responsible for allocation among users ("slices of the pie")
  - Commercial fishery IQ programs – BC, Alaska
  - Catch Sharing Plans – West Coast, BC, Alaska (Bering Sea)
    - Area 2C/3A – Commercial/Sport charter CSP in development
- State agencies provide harvest information

Agency roles and involvement (cont'd)

- Roles and involvement are evolving
  - Through the 1970s, primarily commercial harvest
  - Since 1980s, growth in sport fisheries in all areas, subsistence, and non-retainable bycatch in domestic fisheries have revised/increased roles and processes of federal/state agencies
  - In the U.S., increasing use of Fishery Management Council process to address allocation among user groups
  - Authority and management objectives remain unchanged
- IPHC goal: incorporating all sources of mortality into assessment and management (harvests)

Area 2A sport fishery management

- 1988: Pacific Fishery Management Council adopted a Catch Sharing Plan, allocating available yield among treaty tribes, commercial, and sport users
- Sport (45% of coastwide catch limit)
  - Monitored by state agencies (creel samplers); catches reported weekly
  - Halibut Manager's Group: in-season management actions; state/federal agencies & IPHC
  - Fisheries closed by IPHC when catch limit (CL) is taken, or end of season
- Treaty Tribes (WA State) (35%)
  - Tribes manage allocations; close fishery when CL reached
- Commercial (20%)
  - 10 hr openings for directed fishery, monitored and sampled by IPHC
  - Directed fishery closed by IPHC when CL reached
  - Also includes incidental retention in salmon troll and sablefish LL

IPHC stock assessment

- Halibut resource is considered a single biological unit but management incorporates differences in productivity among areas
- Annual assessment estimates coastwide exploitable biomass (“ebio”)
  - Commercial fishery catch, effort, age/size composition data
  - Removals by all sources – commercial, sport, subsistence, bycatch, wastage for all commercial halibut fisheries
  - Coastwide assessment survey – age, size, area catch rates
- Coastwide ebio divided (“apportioned”) among areas based on results of annual setline survey, adjusted for hook competition and survey timing among areas
  - Relative distribution of survey WPUE and bottom area (0-400 fm) by IPHC regulatory area
- Area biomass x Harvest Rate = Total Constant Exploitation Yield (“TCEY”)
- TCEY minus non-directed removals = Fishery CEY (“FCEY”)

2013 Area 2A assessment metrics

- Exploitable biomass (ebio) – 3.81 Mlbs
- Harvest rate – 0.29
- Total Constant Exploitation Yield (TCEY) – 1.11 Mlbs
- Other removals (bycatch, fishery discards) – 0.11 Mlbs
- Fishery CEY – 0.99 Mlbs
- 2013 Fishery Catch Limit – 0.99 Mlbs
  - Sport fishery: 418,100 lbs
  - Treaty tribal fishery: 346,500 lbs
  - Commercial fishery: 225,400 lbs

Management Strategy Evaluation (MSE) & Management Strategy Advisory Board (MSAB)

- A formal process to evaluate the performance of alternative management procedures for the Pacific halibut fishery, prior to any implementation
- Evaluation conducted within a simulation model
  - Effects on resource and fishery relative to pre-established, measurable objectives
  - Allows re-evaluation and revision of objectives based on results
  - Expected to take several years of development and will be an ongoing process
- Alternative procedures developed by an advisory board – the MSAB
  - Feb. 5: Announcement for nominations
  - Over 40 individuals nominated
  - April 3: MSAB members (16) announced

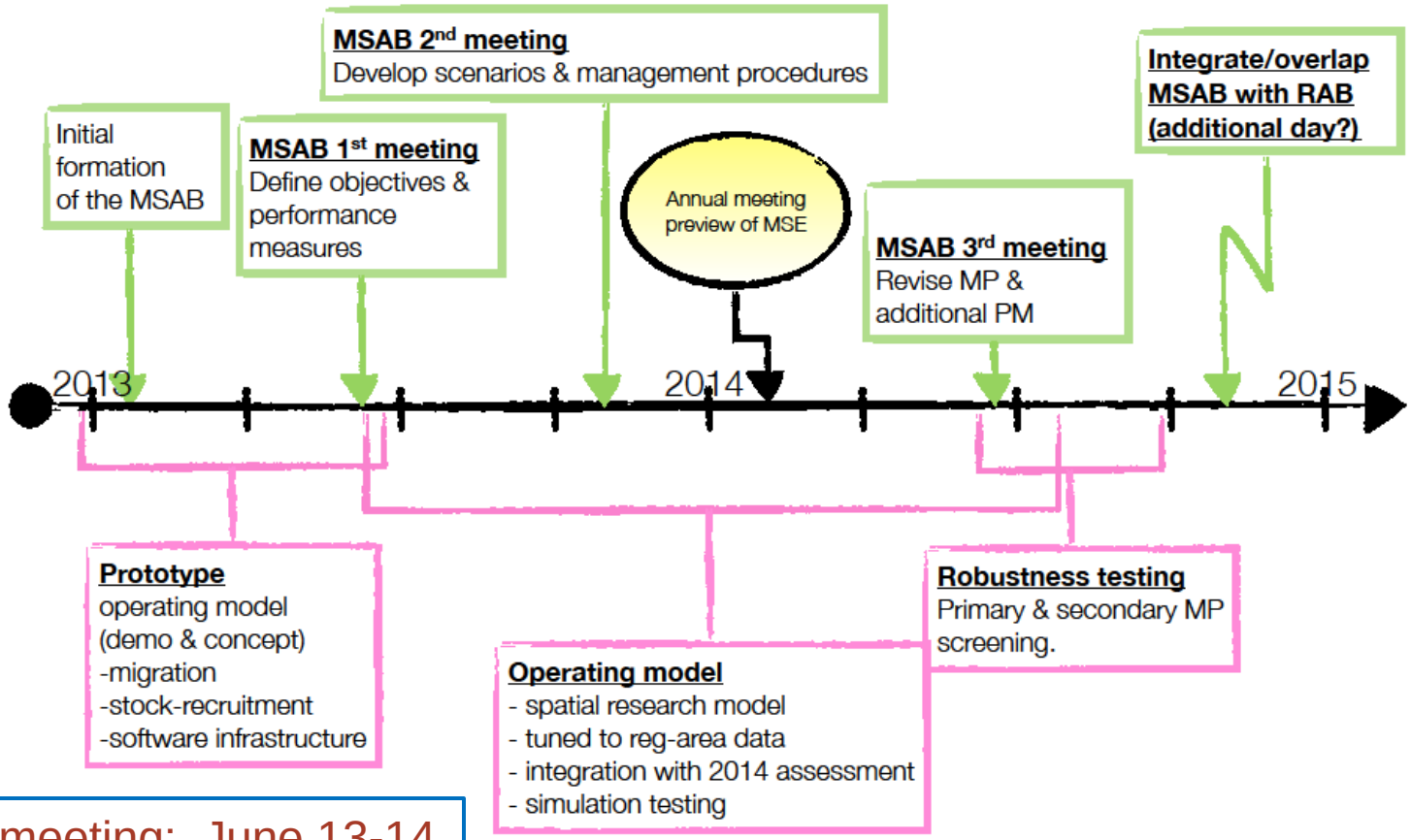
Role of the MSAB

- Propose conservation targets and limits (e.g., B30%, B20%)
- Propose catch rate targets (maintain profitability)
- Evaluate variation in annual yield
- Address risk tolerance (acceptable probabilities, useful for initial screening of MP's)
- Technical advice on developing operating model components
- What data/assumptions should be used/considered
- What type of estimator should be used
- Harvest control rules (data-based vs. model-based)

MSAB membership

MEMBER	COUNTRY	SECTOR
Brad Mirau	CDN	Processing
Bruce Gabrys	U.S.	Commercial
Chris Sporer	CDN	Commercial
Dan Hull	U.S.	Fish Mgmt Council
Gary Robinson	CDN	Commercial
Gregg Elwood	U.S.	Commercial
Jeff Kauffman	U.S.	Commercial
Jim Lane	CDN	First Nation
John Woodruff	U.S.	Processing
Michele Culver	U.S.	Fish Mgmt Council
Peggy Parker	U.S./CDN	Processing
Per Odegaard	U.S.	Commercial
Ryan Littleton	U.S.	Commercial
Scott Mazzone	U.S.	Tribal
Shane Halverson	U.S.	Processing
Tom Marking	U.S.	Sport
Ex-officio		
Adam Keizer	CDN	Fed Fisheries Manager
Loh-Lee Low	U.S.	IPHC Sci. Advisor
Rachel Baker	U.S.	Fed Fisheries Manager
Rob Kronlund	CDN	MSE Expert
Robyn Forrest	CDN	IPHC Sci. Advisor
Scott Meyer	U.S.	Sport Fishery Manager
James Balsiger	U.S.	IPHC Commissioner
Paul Ryall	CDN	IPHC Commissioner

Time line (Draft)

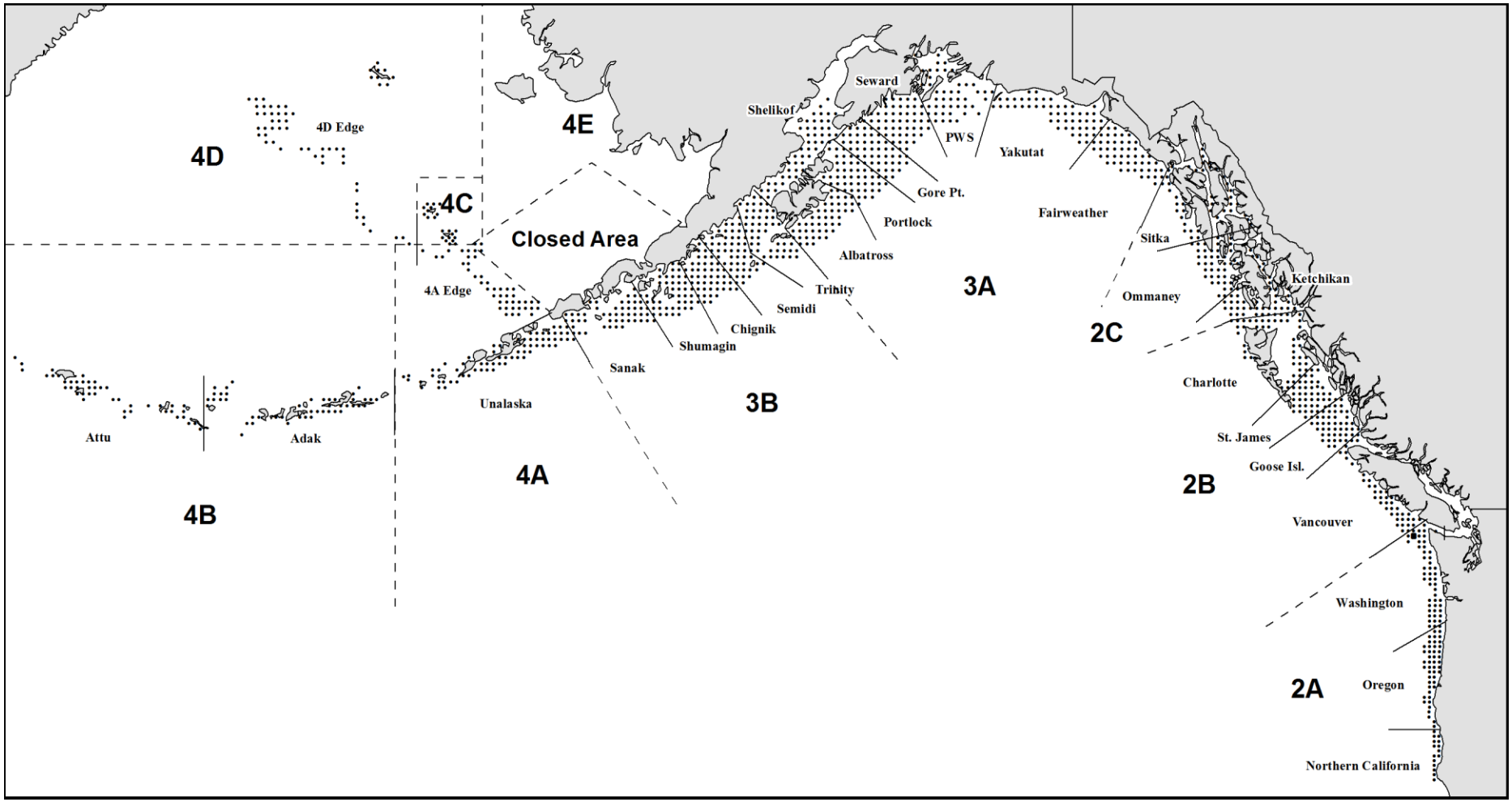


1st meeting: June 13-14
2nd meeting: Late Oct.

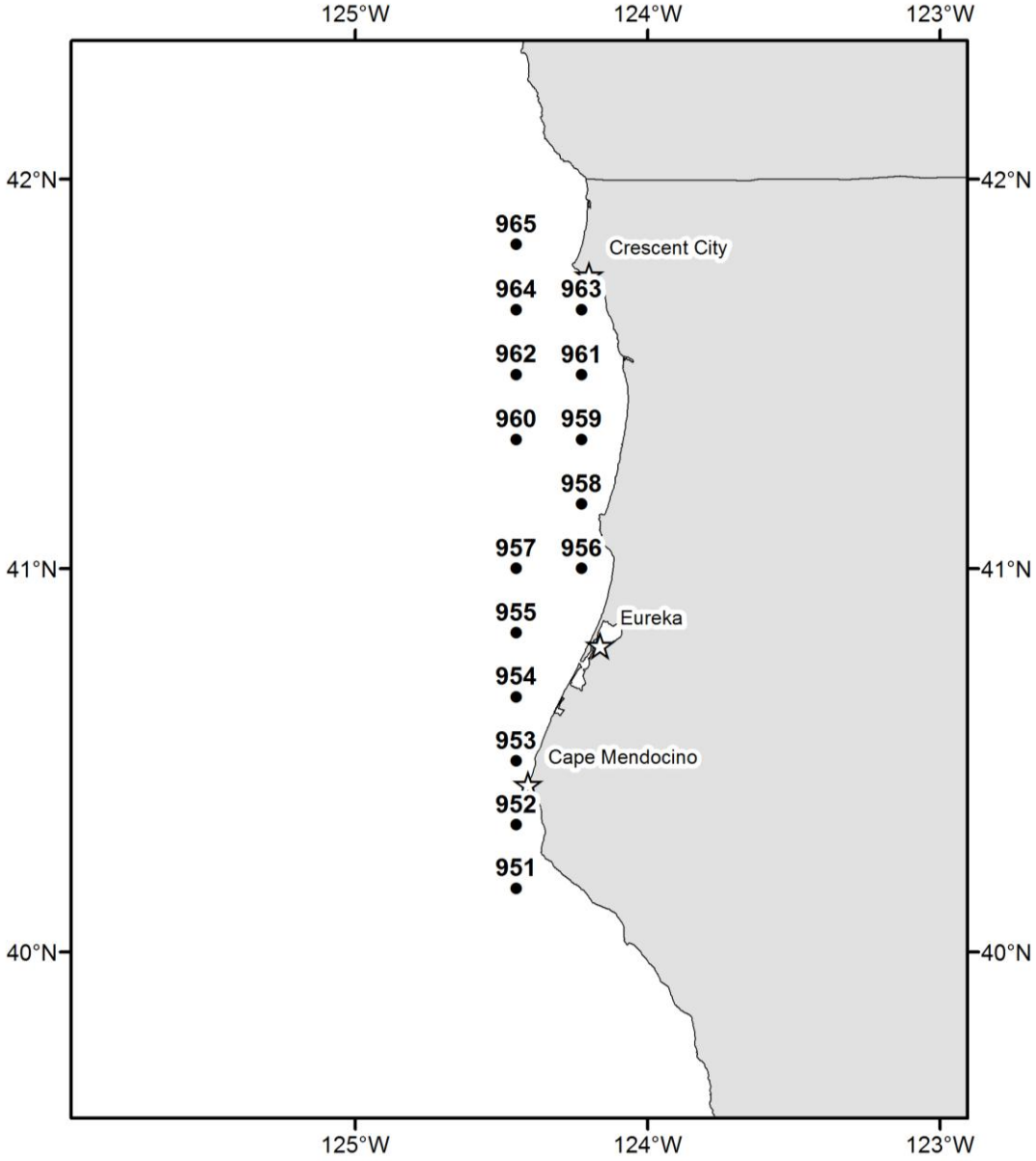
IPHC Assessment Survey

- A systematic, standardized design initiated in 1997
  - 10 x 10 nm grid
  - ~1,250 stations fished annually
  - 20-275 fathoms
  - Coastwide, northern Bering Sea to northern California
- Standard gear configuration is used in all areas
  - Generally 6 skates of fixed-hook setline gear
  - 18-ft spacing, 100 hooks/skate, 16/0 (#3) circle hooks
- Fixed setting and hauling schedules; standardized bait
- IPHC charters commercial longline vessels, placing 1-3 staff on board to sample the catch
- Results used for stock assessment and biomass apportionment

2013 IPHC survey stations



2013 Northern California stations

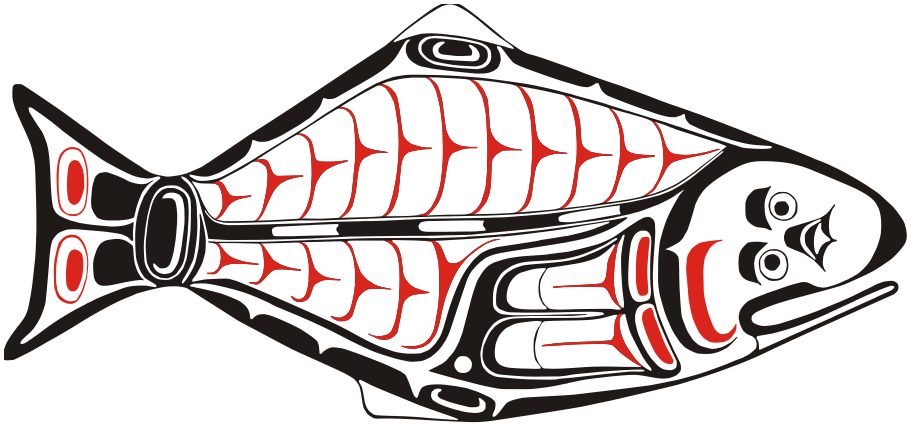


2013 IPHC survey of CA waters

- F/V *Pacific Surveyor*
  - 56’ LOA, blue hull, beige house, 4 crew, 1 IPHC sampler
- Should start in CA waters ~July 22
- 15 stations, 5 days of fishing
- Fishing to 40º10’ north latitude
- Survey will provide an index of abundance for the area, used in estimating biomass and in apportionment
- IPHC policy to not release survey results until assessment is completed (early December)
- Appreciation to CDFW for assistance with permitting

South of Humbug Mtn management

- Currently under review by two groups appointed by the PFMC
  - South of Humbug Technical Workgroup
  - South of Humbug Policy Committee
    - Report to the Council in September 2013
  - CDF&W, ODF&W, WDF&W, NMFS, IPHC
- Presentation here tonight on this work



Questions?