INTERNATIONAL PACIFIC HALIBUT COMMISSION

2026-31 FISS design evaluation

Agenda item 4.2.5

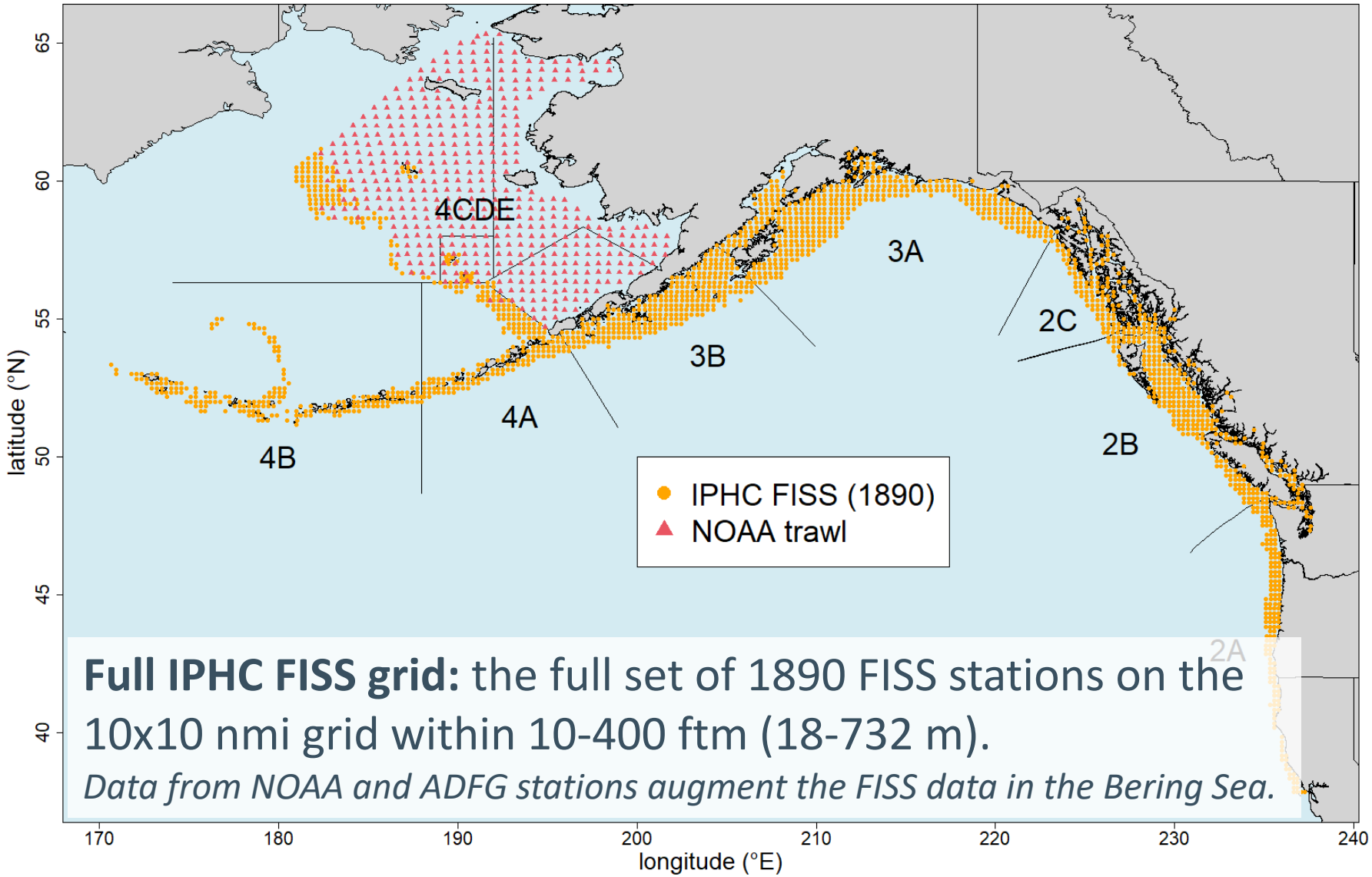
IPHC-2026-SRB028-09

(R. Webster, I. Stewart, K. Ualesi, T. Jack, & D. Wilson)

IPHC FISS

- Our most important source of data on Pacific halibut
- Provides data for estimating weight and numbers per unit effort (WPUE and NPUE) indices of density and abundance of Pacific halibut
  - Used to estimate stock trends
  - Used to estimate stock distribution
  - Important input in the IPHC stock assessment
- Provides biological data for use in the stock assessment
- An annual FISS has been undertaken since 1993
  - Design expanded from 1993-2000 to include sampling in all IPHC Regulatory Areas
  - Further expansion into previously unsampled waters during 2011-2019 period

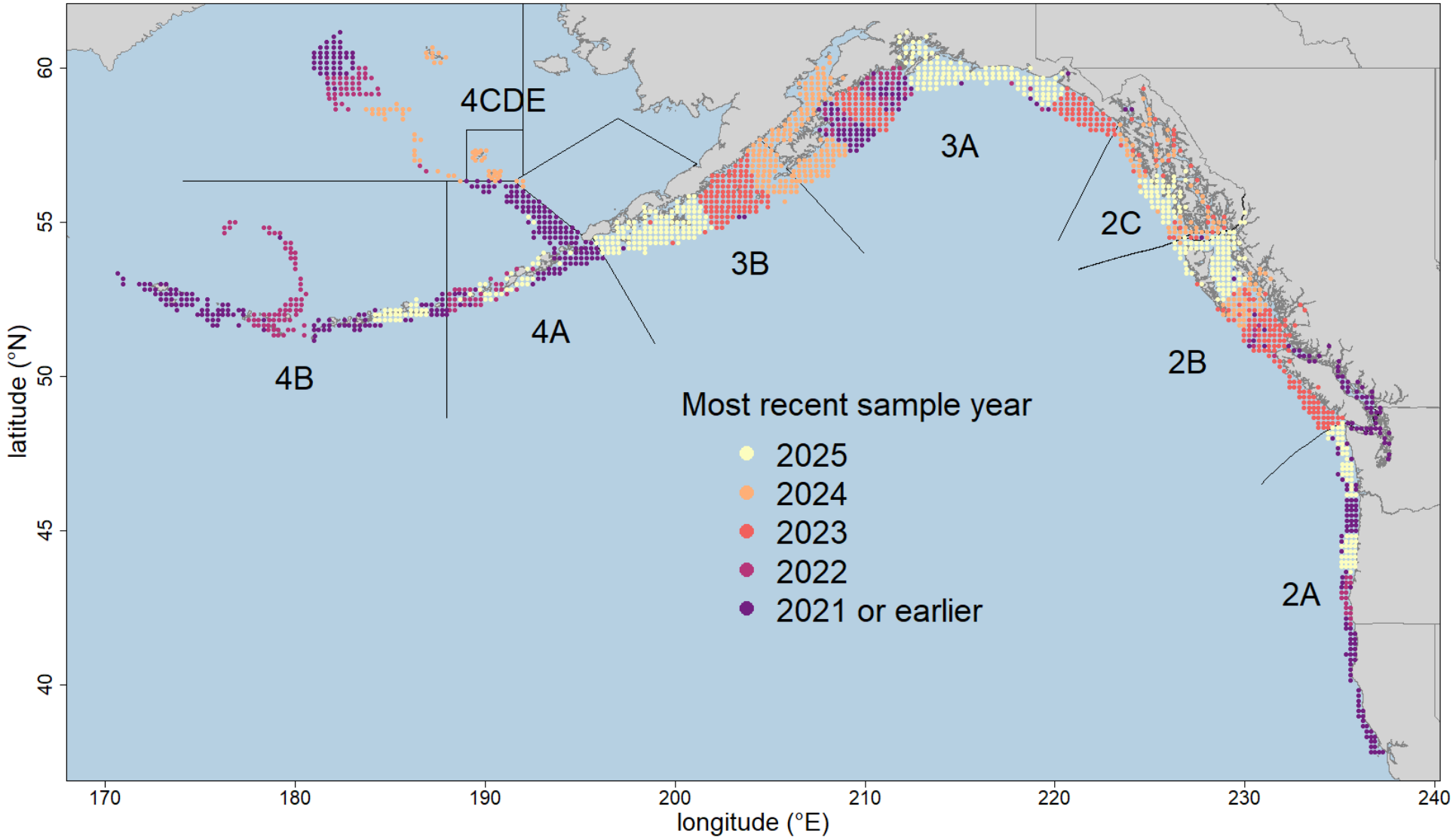
Full FISS grid



Full IPHC FISS grid: the full set of 1890 FISS stations on the 10x10 nmi grid within 10-400 ftm (18-732 m).

Data from NOAA and ADFG stations augment the FISS data in the Bering Sea.

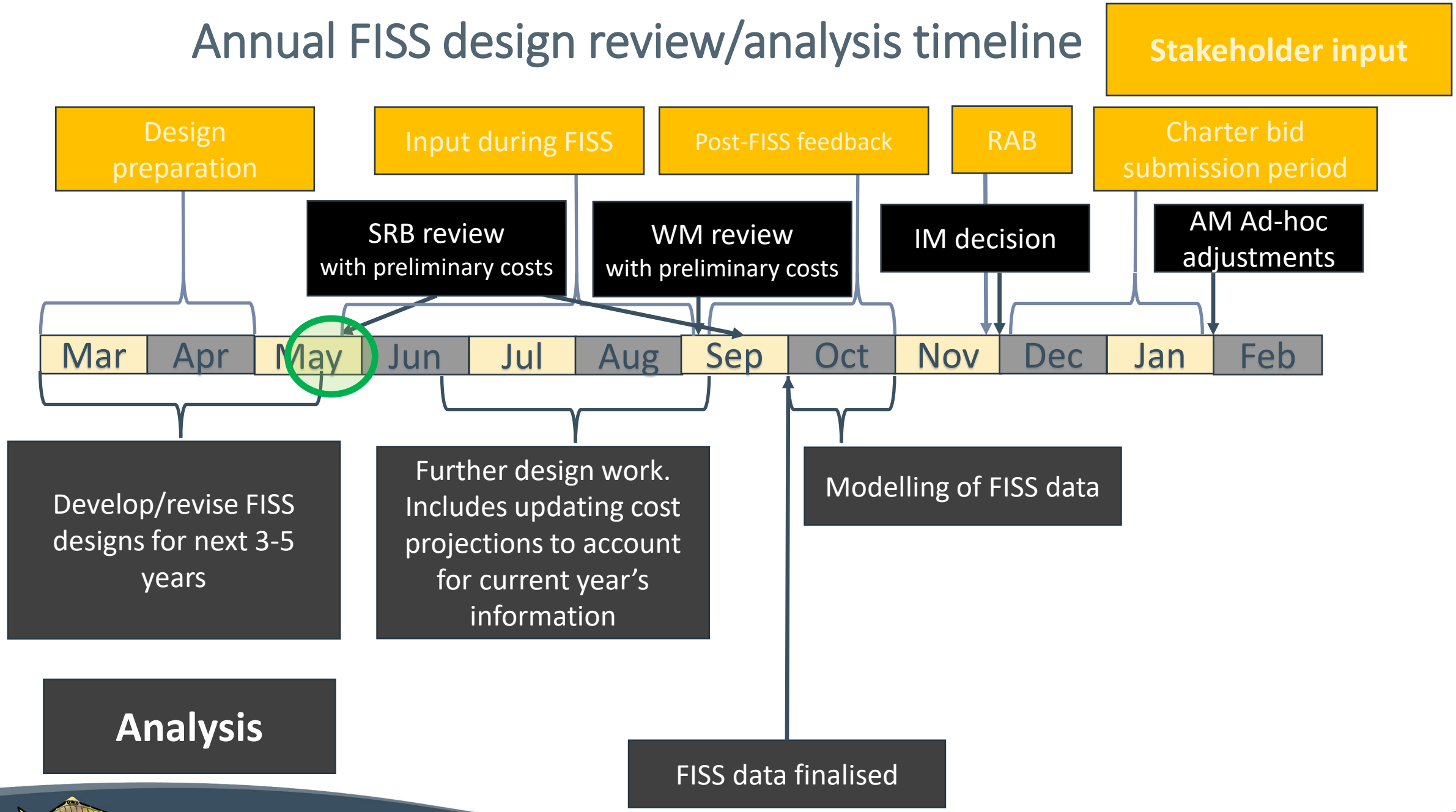
Most recent sampling year by station



FISS objectives and design layers

Priority	Objective	Design Layer
Primary	Sample Pacific halibut for stock assessment and stock distribution estimation	Minimum sampling requirements in terms of: • Station distribution • Station count • Skates per station
Secondary	Cost effectiveness without compromising the scientific integrity of the FISS design.	Balance operational feasibility/logistics, cost/revenue, and scientific needs. Includes an aspirational target reserve of US$2,000,000.
Tertiary	Minimize removals, assist others where feasible on a cost-recovery basis, address specific Commission informational needs.	Removals: minimize impact on the stock while meeting primary priority Assist: assist others to collect data on a cost-recovery basis IPHC policies: ad-hoc decisions of the Commission regarding the FISS design

Annual FISS design review/analysis timeline

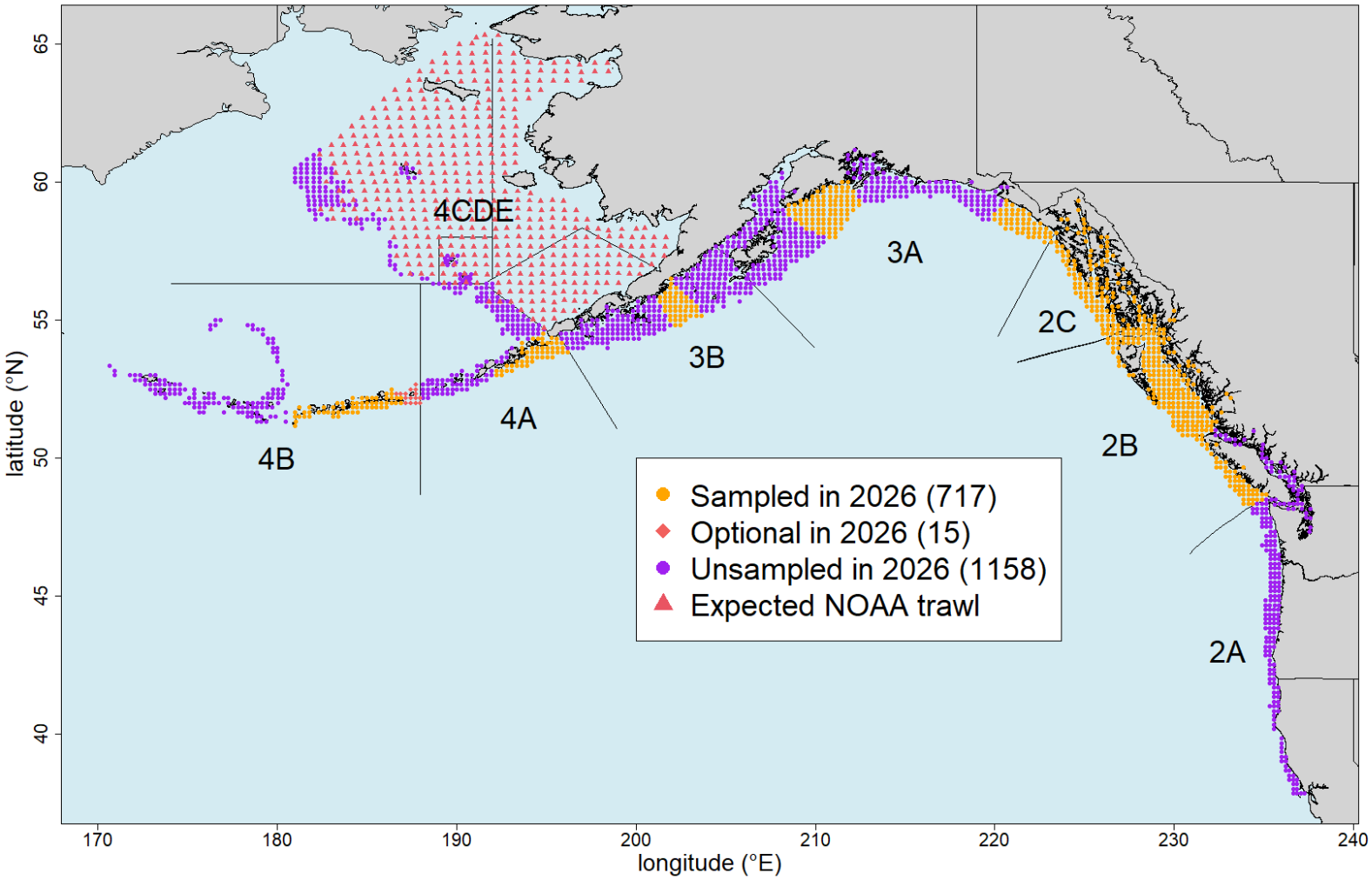


IPHC FISS 2020-25

- 2020: Rationalized FISS design approved
  - Random sampling in core areas (2B, 2C, 3A, 3B)
  - Sampling of blocks of stations elsewhere prioritized to maintain precise estimates with low bias
  - FISS reduced to core areas only due to COVID19
- 2021-22: Proposed design largely implemented
  - Western 4B not sampled in 2022 due to lack of viable bids
- 2023-25: Reduced designs implemented due to financial constraints
  - Little sampling outside core areas in 2023, with no FISS sampling in 4A, 4B or 4CDE
  - Further reductions in 3A and 3B in 2024, but some sampling in 4CDE
  - 2025 sampling in 3A and 3B to complement 2023-24 sampling; sampling higher density parts of 2A and 4A/4B for first time since 2022

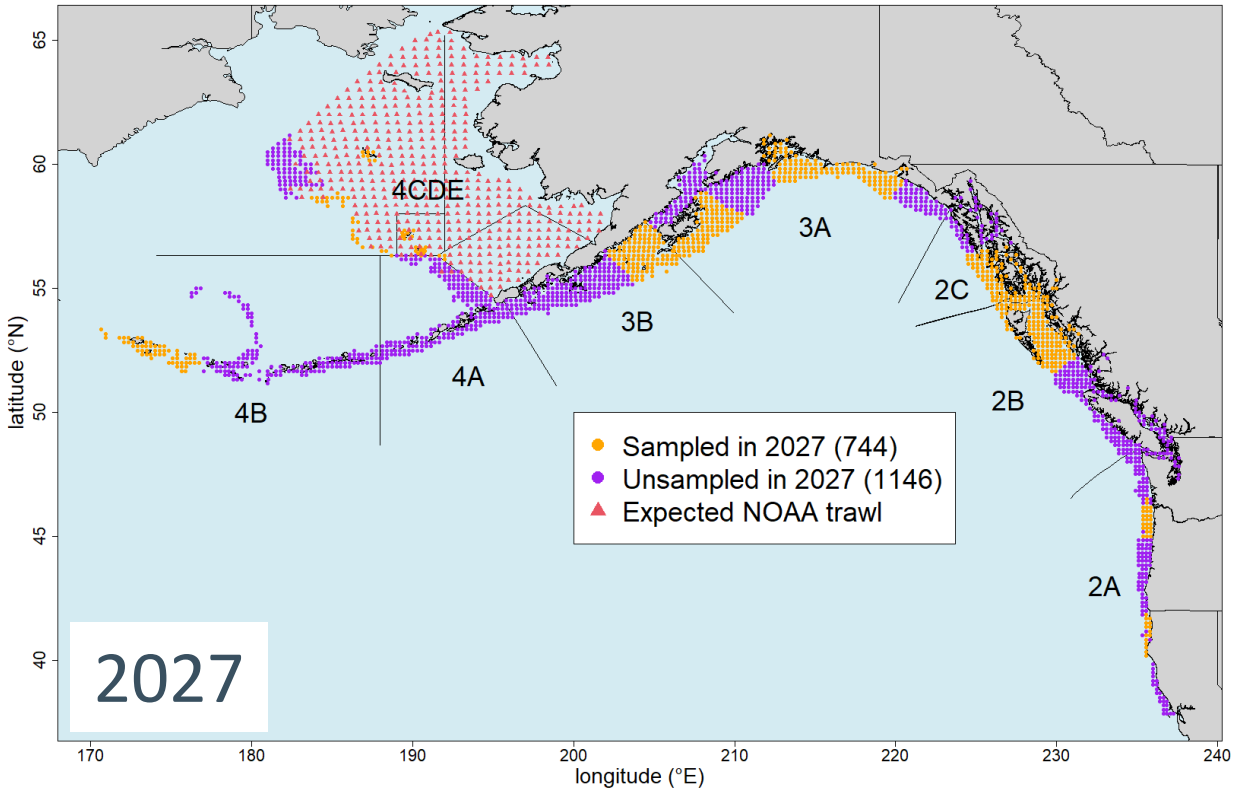
Adopted 2026 FISS design

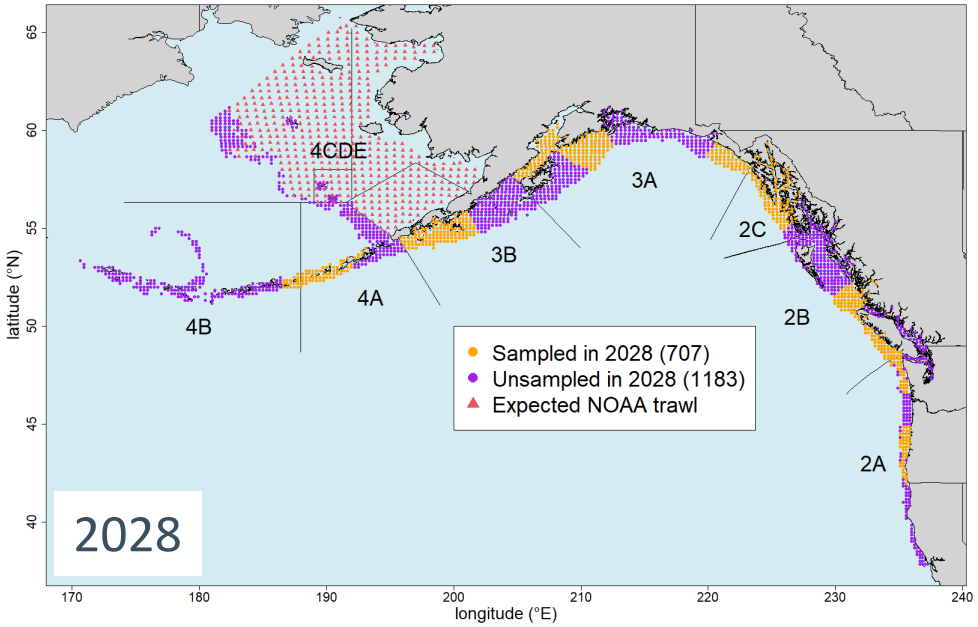
- Increases spatial coverage relative to 2023-25
- Complements the 2025 design by including ten charter regions not sampled last year

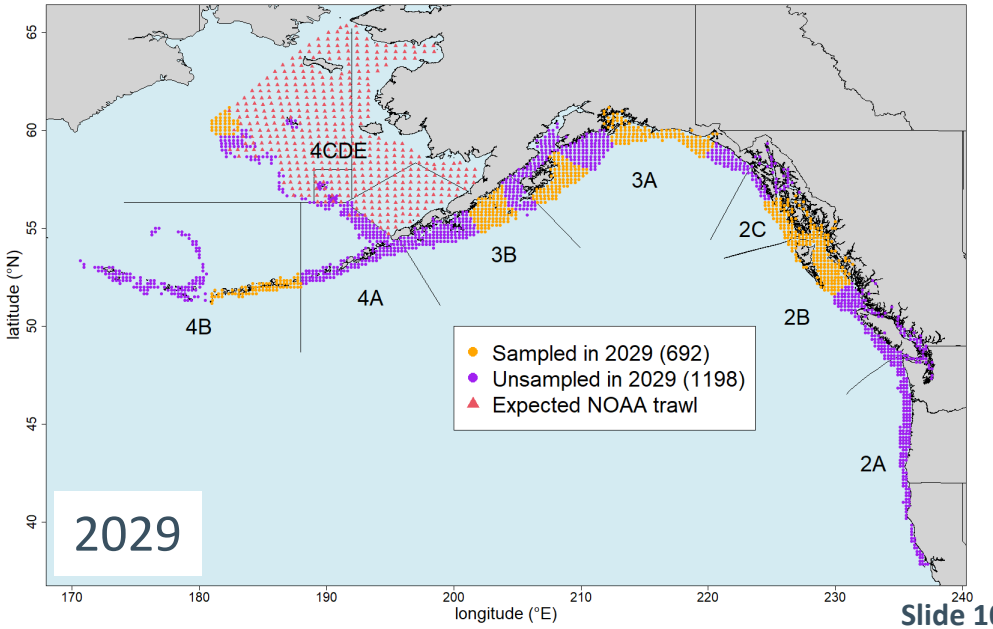


The Base Block design

- The **Base Block design** is considered the **optimal long-term FISS design** in terms of balancing scientific needs and cost-effectiveness:
  - Prioritizes some annual sampling in each Biological Region for stock assessment purposes.
  - Ensures all charter regions in the core of the stock (2B, 2C, 3A and 3B) are sampled over a three-year period
  - Coverage in other areas is prioritized to minimize bias potential and maintain relatively precise estimates
- The sampled blocks (charter regions) are rotated over time.
- The Commission has noted that “the use of the Base Block Design will be the focus of future planning and annual FISS proposals from the Secretariat” (e.g., IPHC-2026-AM102-R, para. 72)







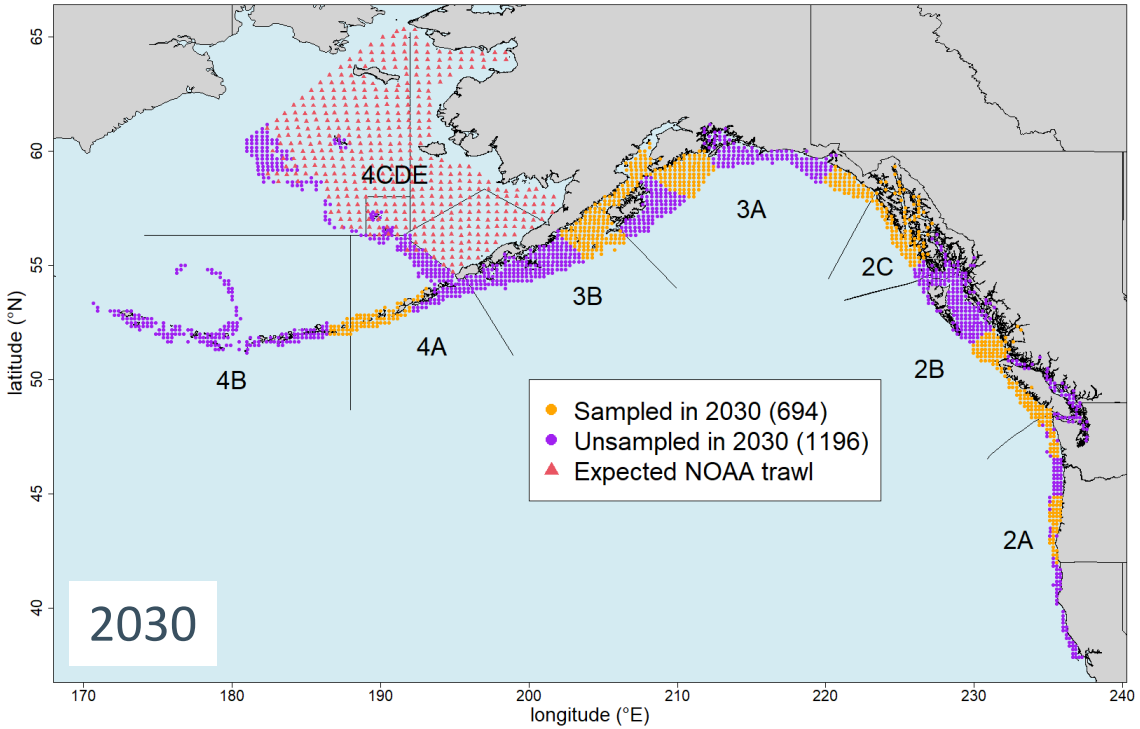
Potential Base Block designs 2027-29

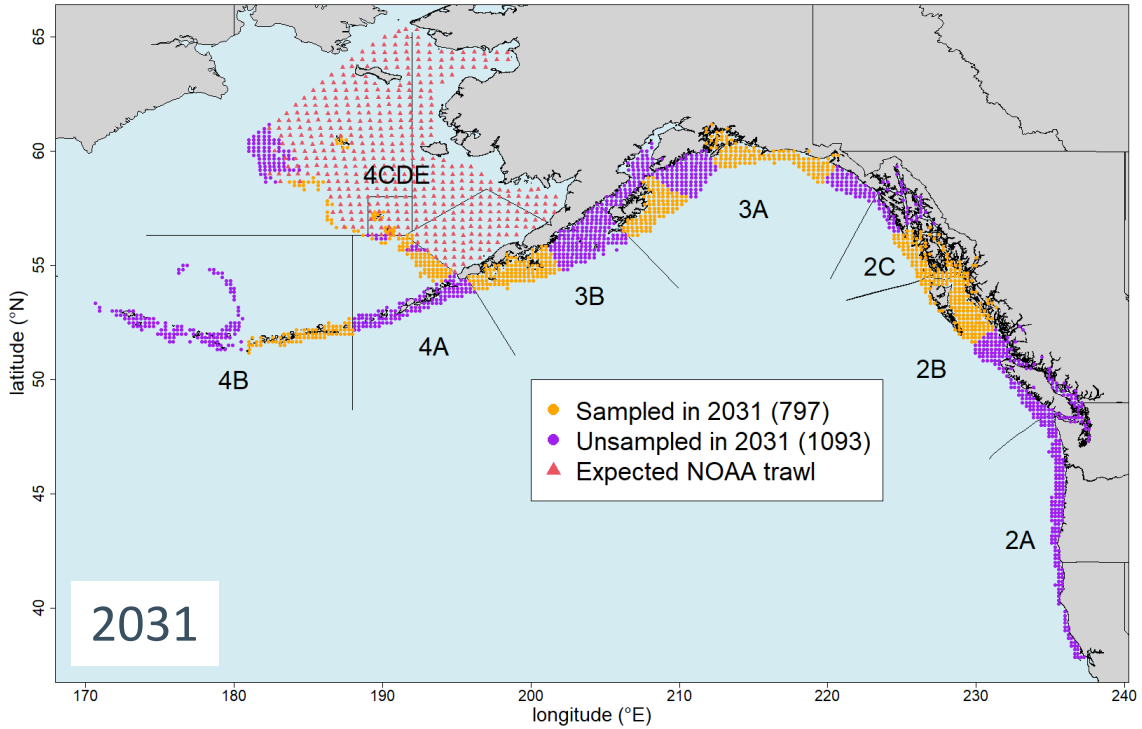
Projected coefficients of variation* (CVs)

Regulatory Area	Base Block		
	2027	2028	2029
2A	26	16	22
2B	5	10	7
2C	6	6	6
3A	8	7	7
3B	14	12	9
4A	24	12	19
4B	16	17	14
4CDE	9	9	8
Biological Region			
Region 2	5	5	4
Region 3	7	6	6
Region 4	11	7	9
Region 4B	16	17	14
Coastwide	4	4	4

* For terminal year of time series. Projected using IPHC's space-time modelling.

Base Block Designs 2030-31

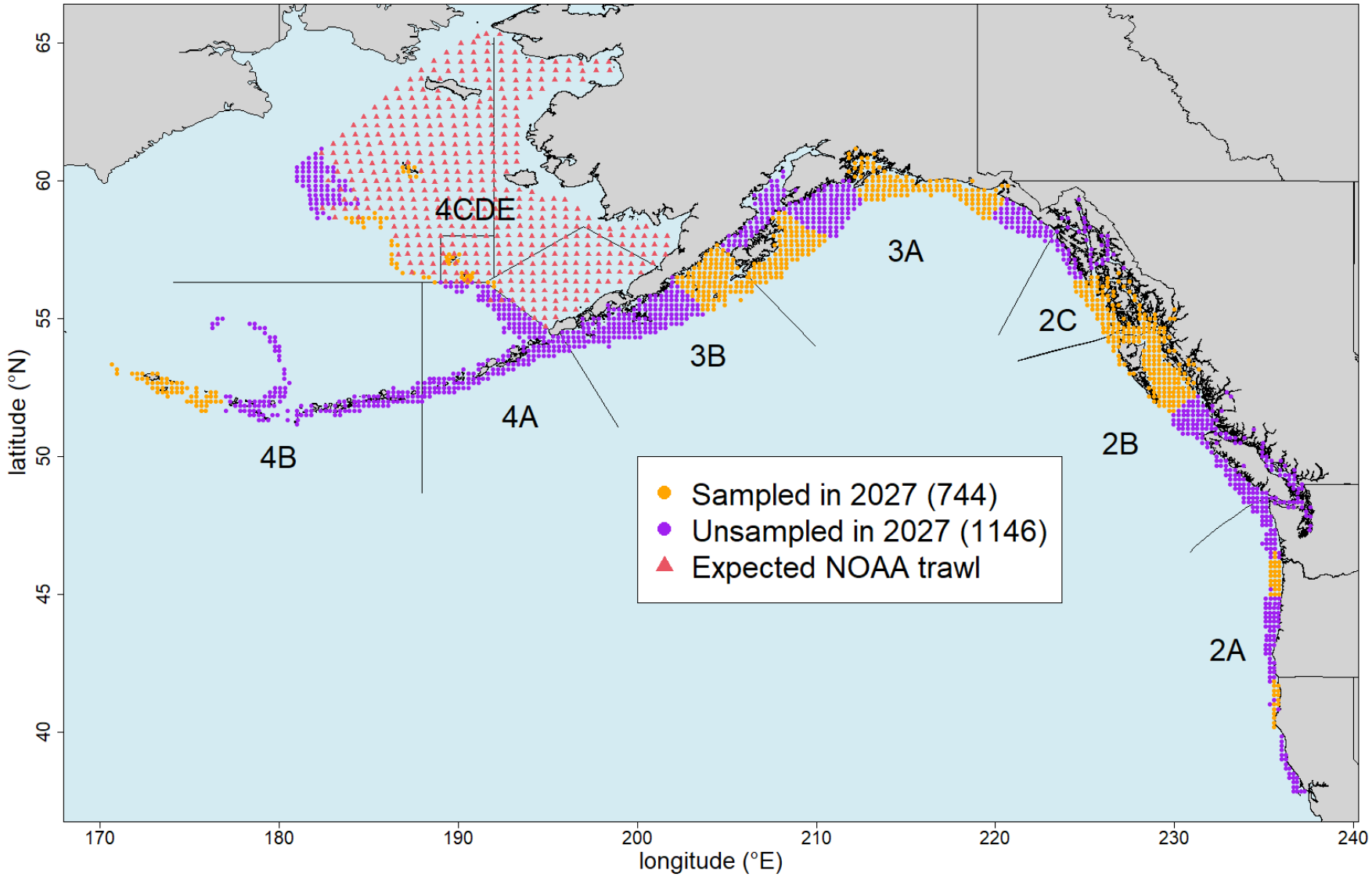




Cost evaluation for 2027

- Projected costs for 2027 design options were estimated assuming:
  - Designs are optimized for numbers of skates, with 4, 6 or 8 skate-sets used, depending on projected catch rates and bait costs
  - Pacific halibut sales price is unchanged from 2025 values, ranging from about $6 to $10/lb by charter region (coastwide average US$8.18/lb)
  - Pacific halibut landings will remain unchanged from 2025 values
  - The price of chum salmon bait remains at the 2026 price of US$2.40/lb

2027 Base Block design



Projected net revenue (US$):
($1,017,000)

Income: $3,072,000
Expenses: ($4,089,000)

Projected income and expenses

Design		2027 Base Block design
Income (US$)	Pacific halibut sales	2,976,000
	Byproduct sales	96,000
	Total	**3,072,000**
Expenses (US$)	Base HQ (staff salary and wages, and benefits x 4)	(534,000)
	Vessel contracts	(1,496,000)
	Field staff (salary and wages, and benefits)	(615,000)
	Bait	(483,000)
	Non-IPHC fish sales	(346,000)
	Other expenses*	(614,000)
	Total	**(4,089,000)**
Net revenue		**(US$1,017,000)**

Cost estimates are largely based on information from the 2025 FISS and outcomes of the 2026 charter bidding process, and it is important to note there is uncertainty in the catch and cost projections for 2027.

Projected income and expenses for the 2027 design will be updated once FY2026 has been reconciled (expected late October 2026) and will be used to refine the projections provided in this Briefing Note at that time.

Discussion

- The **Base Block** design has a projected net loss of around $1,017,000 for 2027 and therefore will rely on supplementary funding for implementation.
- Projected deficits for the Base Block design for 2025 and 2026 led to the adoption of reduced designs, although with reductions in spatial coverage mitigated by supplementary funding from the USA and Canada.
- For 2027, the Secretariat staff is working with Commissioners to secure the necessary funding to implement the full Base Block design.

Recommendation

That the Scientific Review Board **NOTE** paper IPHC-2026-SRB028-09, which presents potential Base Block designs for 2027-31, including a preliminary projection of revenue and expenses for the 2027 design.

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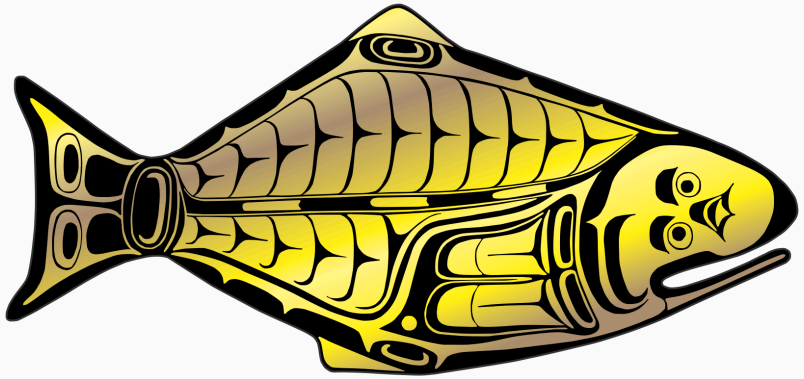

HALIBUT COMMISSION

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