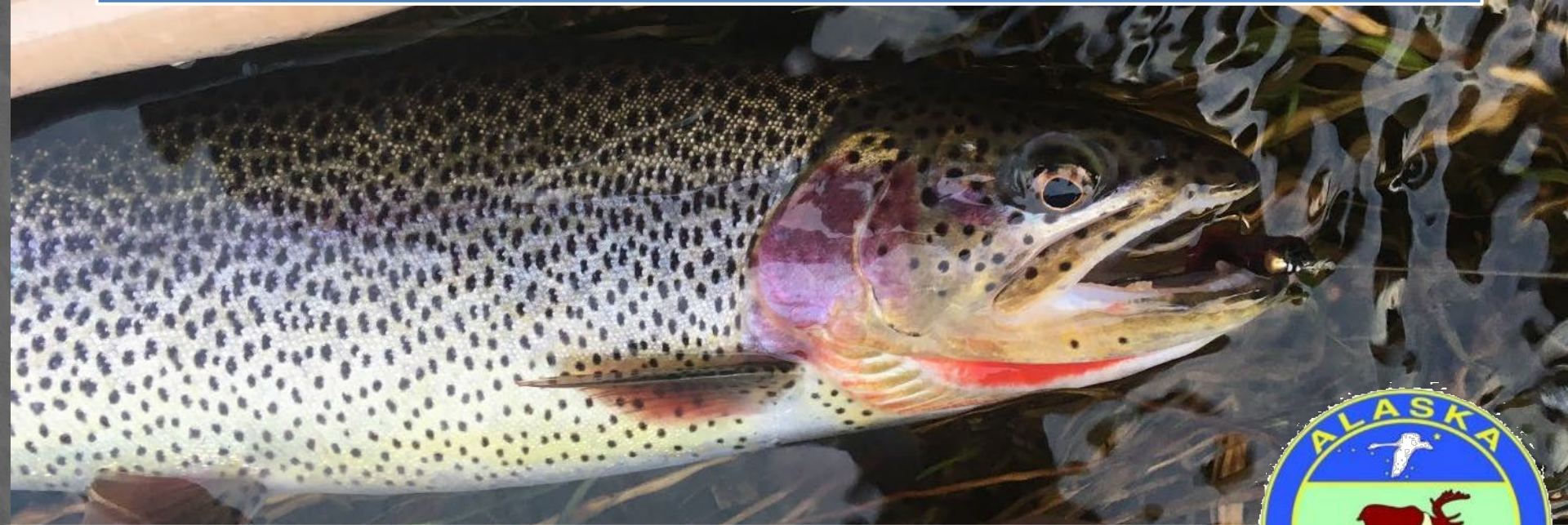
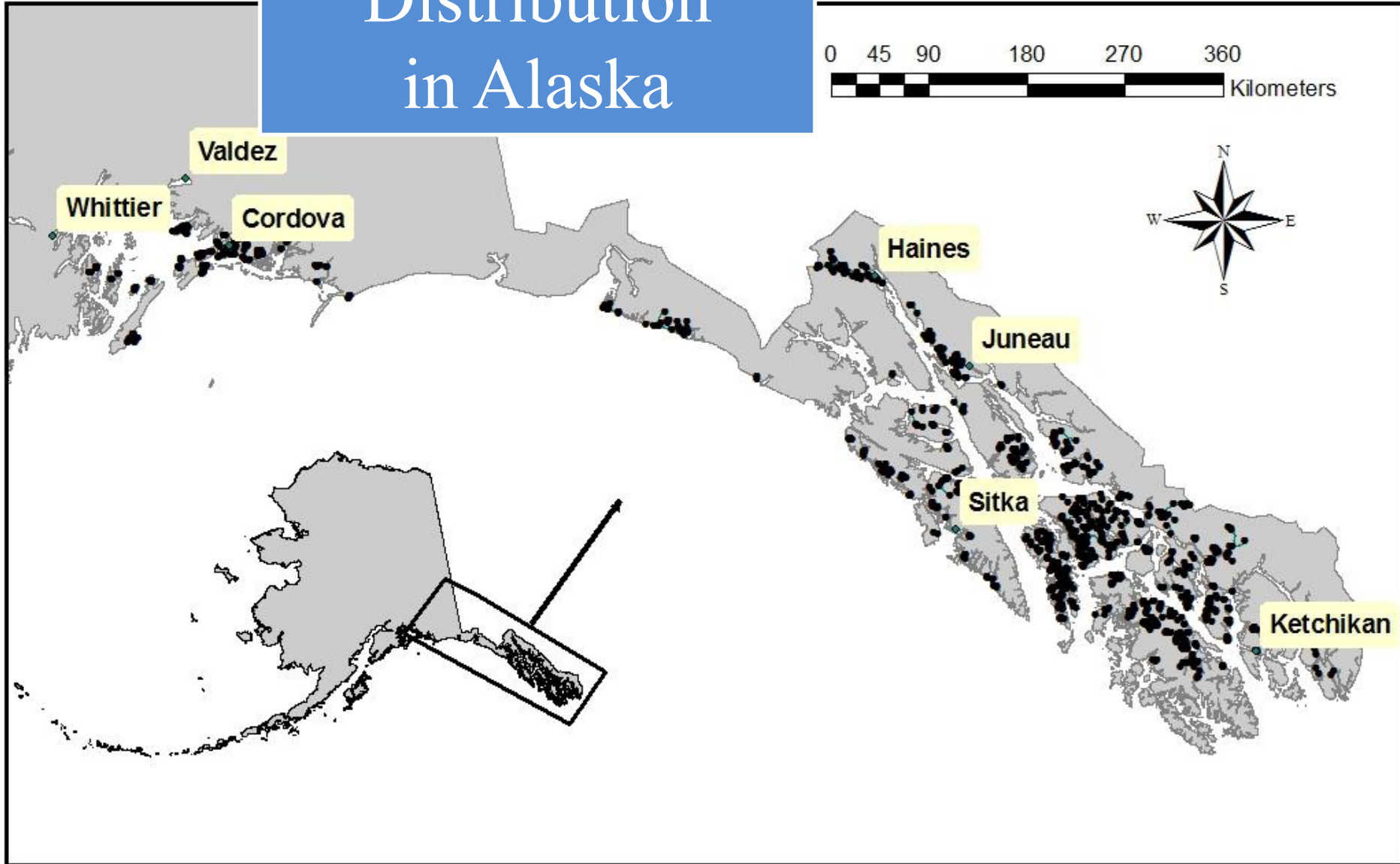
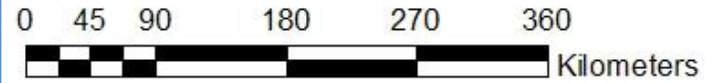


Alaska Cutthroat Trout Management & Research



Craig Schwanke
Alaska Department of Fish and Game
Sport Fish Division

Cutthroat Trout Distribution in Alaska



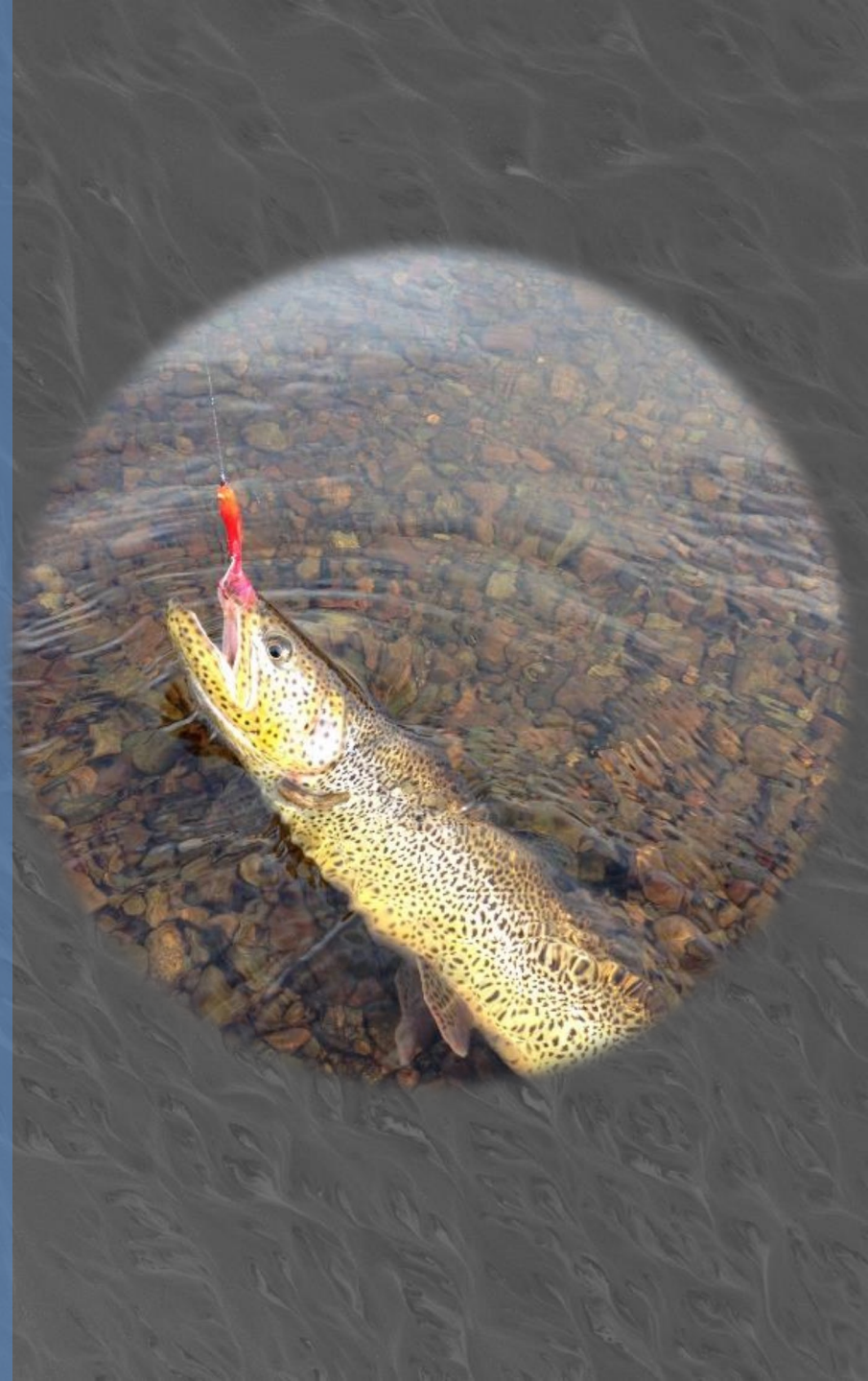
Trout Management

- 5 AAC 75.220 Statewide Management Standards for Wild Trout

- ✓ Optimal Sustained Yield
- ✓ Conservative Regulations

- 5 AAC 75.222 Policy for the Management of Sustainable Wild Trout Fisheries

- ✓ Recognizes importance of healthy trout/steelhead populations to Alaska
- ✓ Conservative management
- ✓ Habitat protection
- ✓ Importance of scientific research to guide management



Conservative Sport Fishing Regulations

Southeast Alaska

General Limit: 2 per day (combined rainbow and cutthroat)

- Size limit 11 – 22"
- Bait prohibited November 16 - September 14

Special Regulations by water body based on ADFG research

- Trophy Cutthroat Trout Lake
 - Minimum size of 25"
- High-Use Waters
 - Minimum size of 14"
- Small Trout Lakes
 - Size limit 9 – 22"
- Stocked and High Productivity Lakes
 - 5 per day
 - Bait allowed

Prince William Sound

General Limit: 2 per day (combined)

- Size limit 11 – 16"
- Spawning closure/no bait April 15-June 14

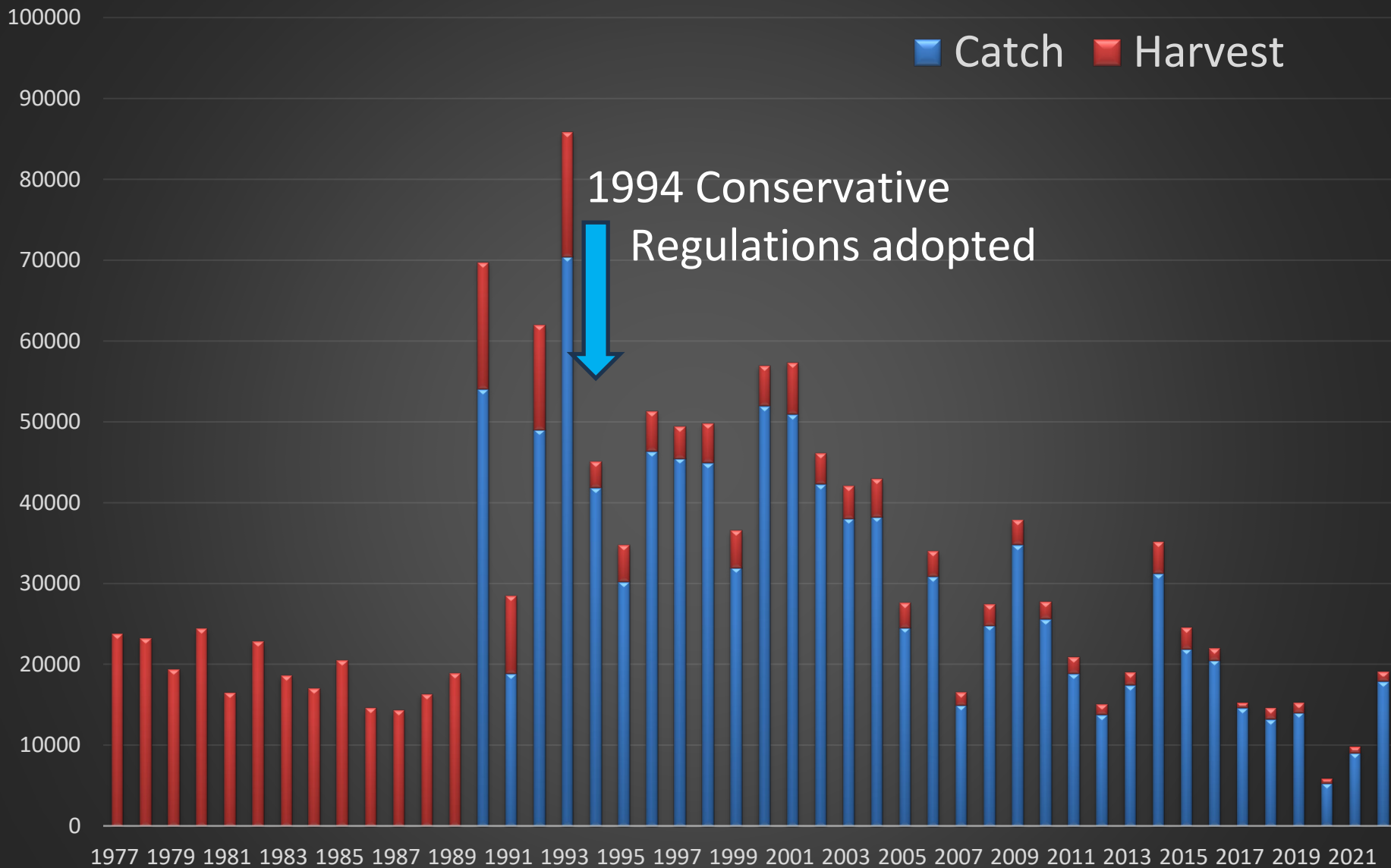
2023 SPORT FISHING REGULATIONS SUMMARY
SOUTHEAST ALASKA
Effective until the 2024 summary is issued

SCAN THE QR CODE TO
DOWNLOAD THE ADFG
MOBILE APP TODAY!

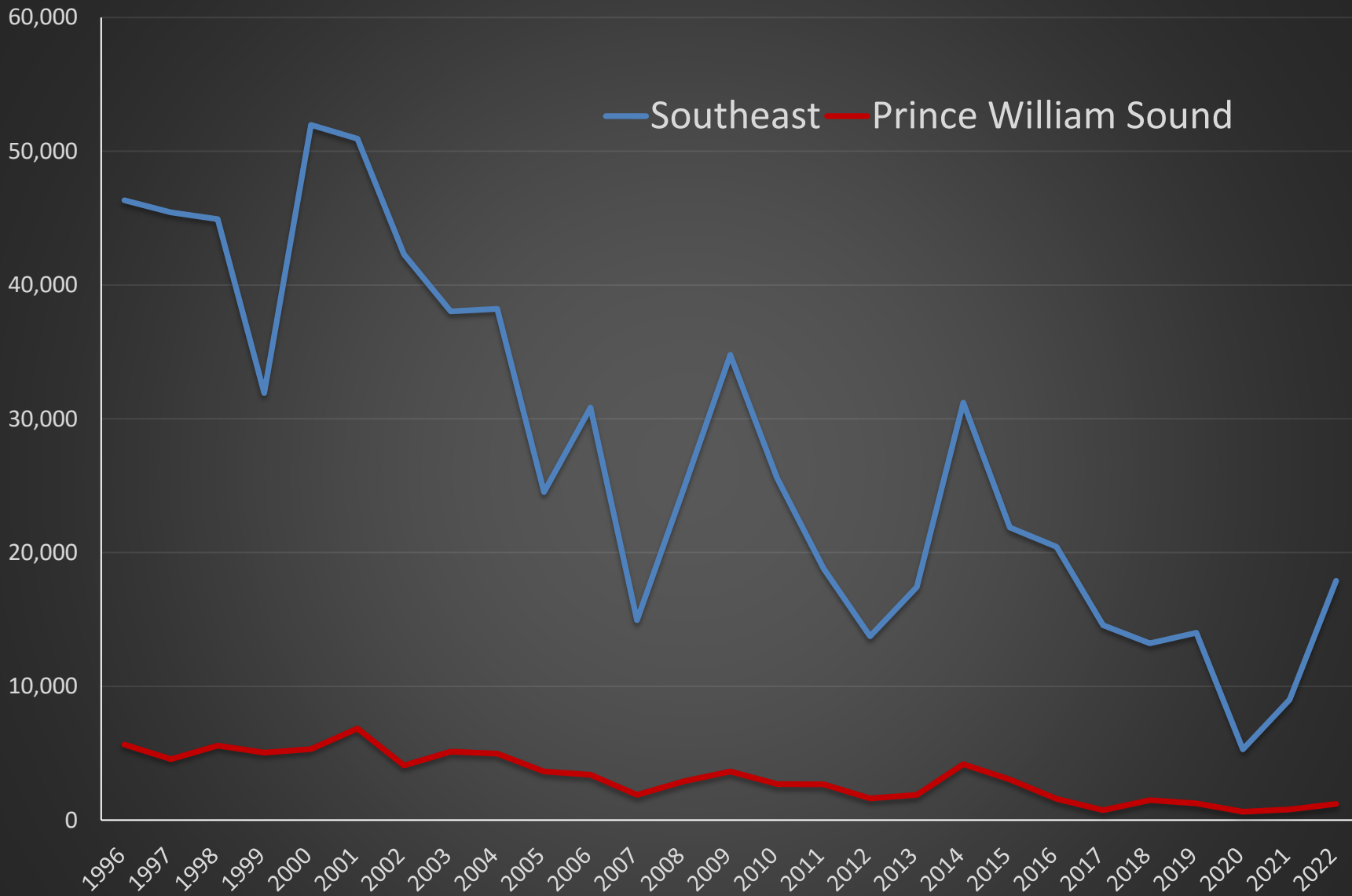
Get Out and Fish Together.

LICENSING & REGIONAL REGULATIONS | YAKUTAT | HAINES & SKAGWAY | JUNEAU & GLACIER BAY | SITKA | PETERSBURG & WRANGELL | PRINCE OF WALES ISLAND | KETCHIKAN

Cutthroat Trout Sport Catch and Harvest



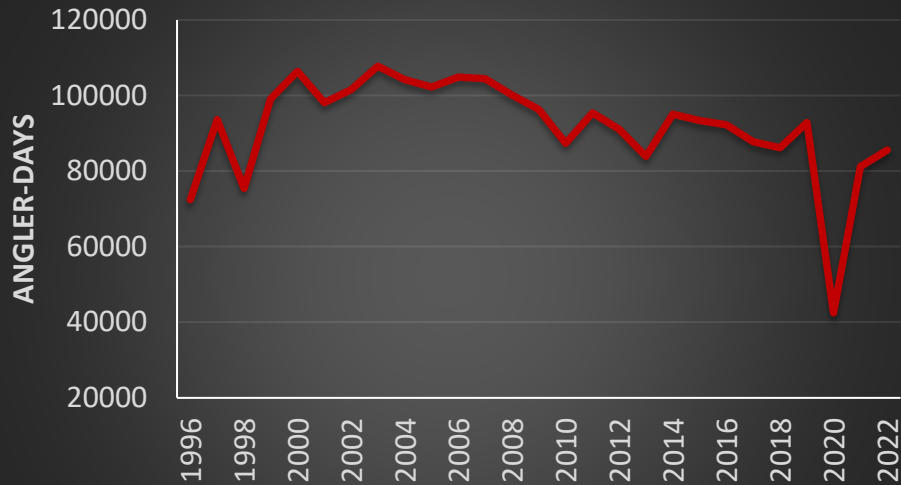
Statewide Cutthroat Catch



Reduced Catch = Reduced Interest?

Freshwater Angler Effort

Slight decrease since early 2000s



Lack of Interest

- Nonresidents target salmon/bottomfish
- Expense of travel to remote lakes

Restrictive Regulations

- Need to liberalize regulations?
- Board of Fish is public process



Cutthroat Trout Research

Southeast Alaska

1988 – 2006

- Mark-Recap, Weirs, Maturity, etc.
- 40+ studies published

1992-2012

- Cabin Survey (ADFG & USFS)
- Information from 64 drainages

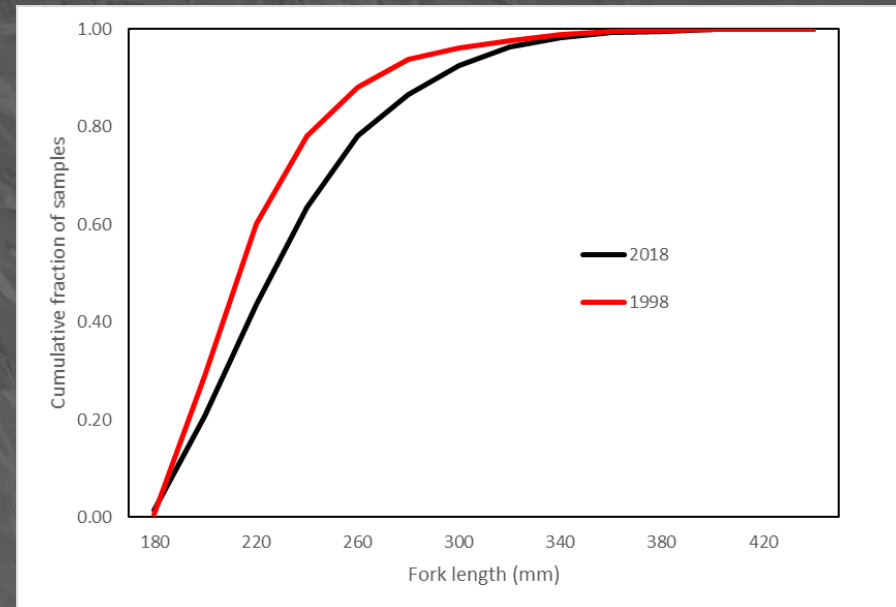
2018-2019 & 2023-2024

- Develop a Lake Sampling Protocol “Rapid Assessment”
 - Conducted 2 Mark-Recap abundance estimates
 - Trap Assessments
 - Implement Rapid Assessment



2018 Neck Lake Assessment

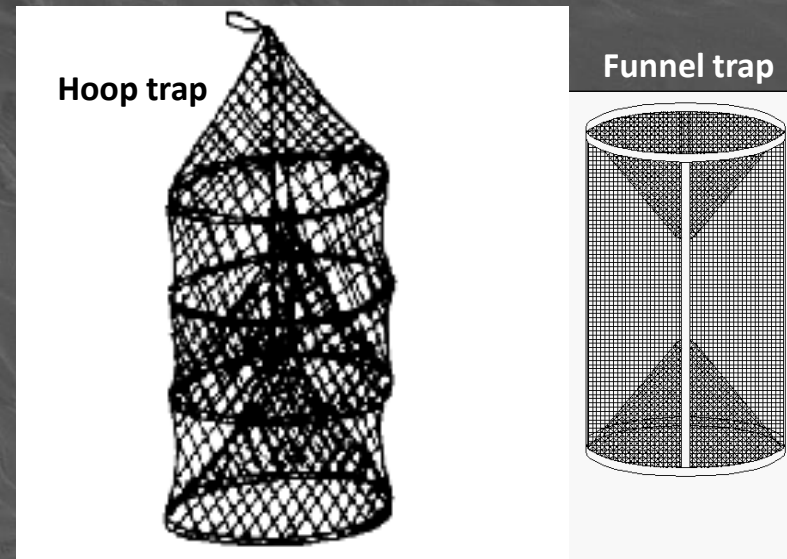
- **Capture Data**
 - ~ 1,000 fish per event
 - ~ 850 \geq 180 mm FL per event
 - 137 recaptures
- **Mark-Recapture Abundance**
 - Estimate of 4,959 (95% CI 4,910-5,610)
 - 1,848 more fish than 1998
- **Length Composition**
 - Mean length of 231 vs 222
- **Examine Reduced data sets**



2019 Neck Lake Trap Assessment

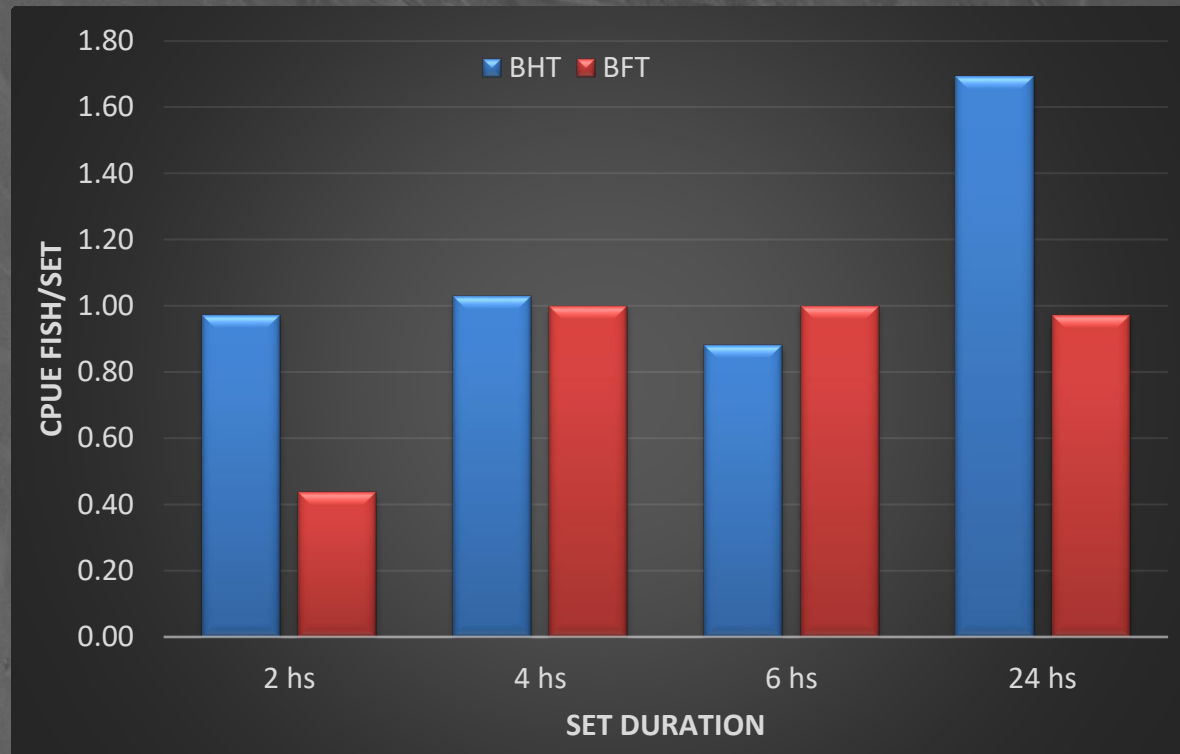
- **Trap Retention**
 - Checked traps at 4 & 20 hr intervals
 - Fish tagged and placed back in trap
 - Proportion of tagged fish in subsequent checks
 - Which trap retained fish better?

	<u>CT \geq 180</u>	<u>CT < 180</u>
BHT (n=48)	68%	83%
BFT (n=36)	56%	40%



2019/23 Neck Lake Trap Soak Time

- Optimal Soak Time
 - Fish per set-time interval
 - Traps checked and pulled at 2, 4, 6 & 20 hr intervals
 - Number of fish per trap
 - Which soak time was most productive?



Rapid Assessment

- Develop protocol to sample SE AK lakes over short period of time (3-days)
 - If CPUE can be used as index of abundance?
 - If can get meaningful length composition estimates?
- Compared CPUE and length from 3-day datasets to mean of entire mark/recap sample
 - Mean CPUE extremely variable
 - ✓ - Mean length minor variability



Eagle Lake Rapid Assessment

- Rapid Assessment to estimate length composition
 - Baited hoop traps
 - Lake divided into 3 areas
 - Checked at 2, 4, 6 and 24 hour intervals
 - Hook and line sampled between checks
- Results
 - Almost 1,200 cutthroat in 3 days
 - Exceeded sample goal day 2
- Conclusion
 - Rapid Assessment strategy can be successful for collecting length comp.

	Section	HT	HL	Total
≥ 180 mm FL	A	12 traps	207	51
	B	8 traps	75	36
	C	8 traps	147	39
			429	126
<180 mm FL	A	12 traps	241	3
	B	8 traps	127	1
	C	8 traps	240	2
			608	6
			Total	
			CT:	1169



Future Work/Questions

