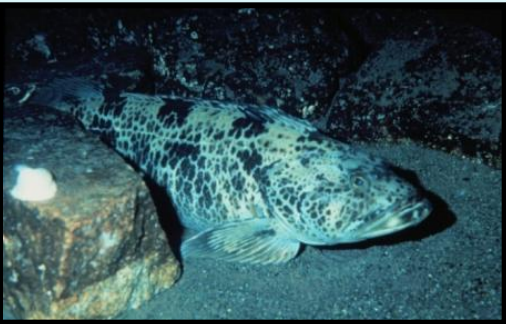


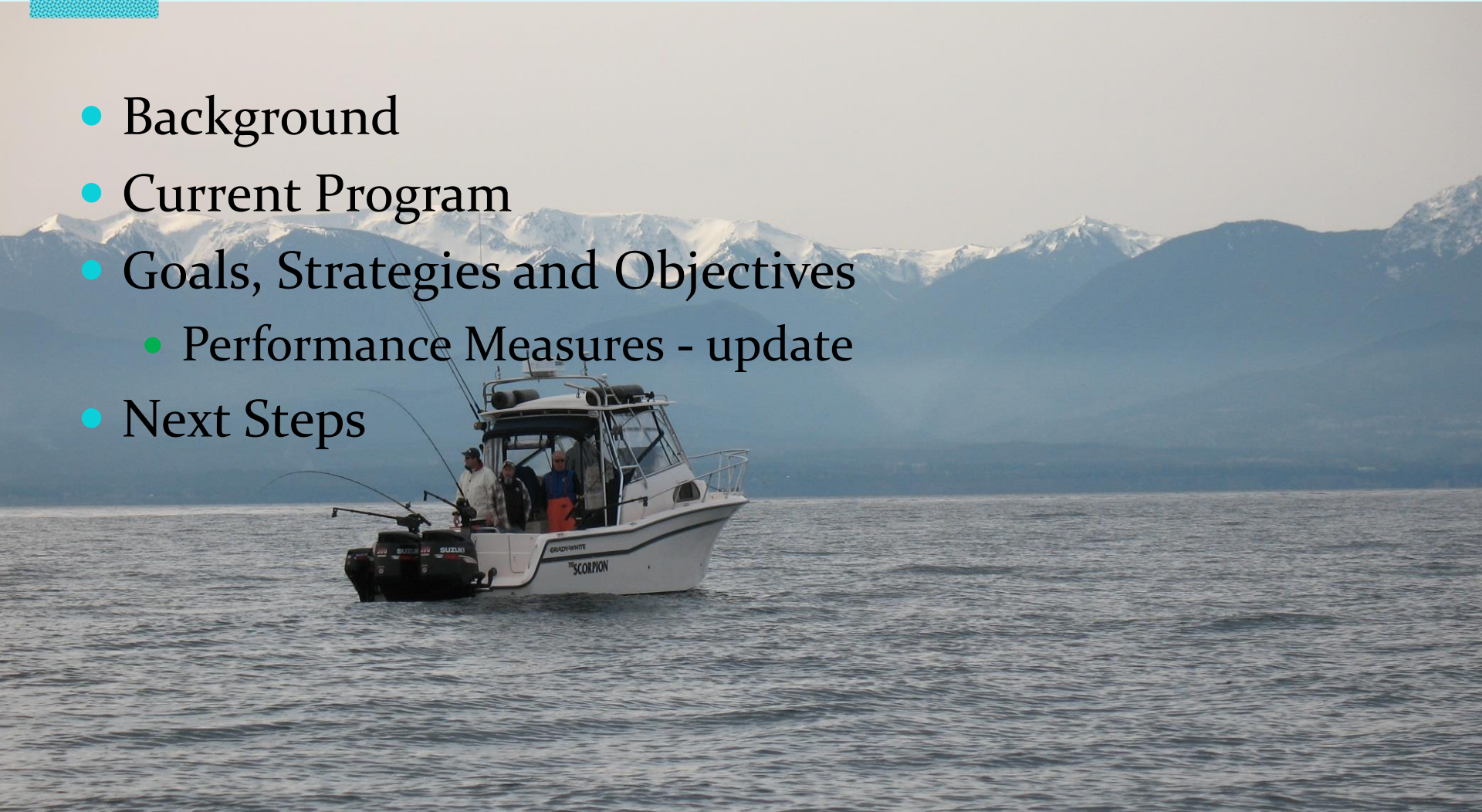
Puget Sound Recreational Salmon and Marine Fish Enhancement Program





Agenda

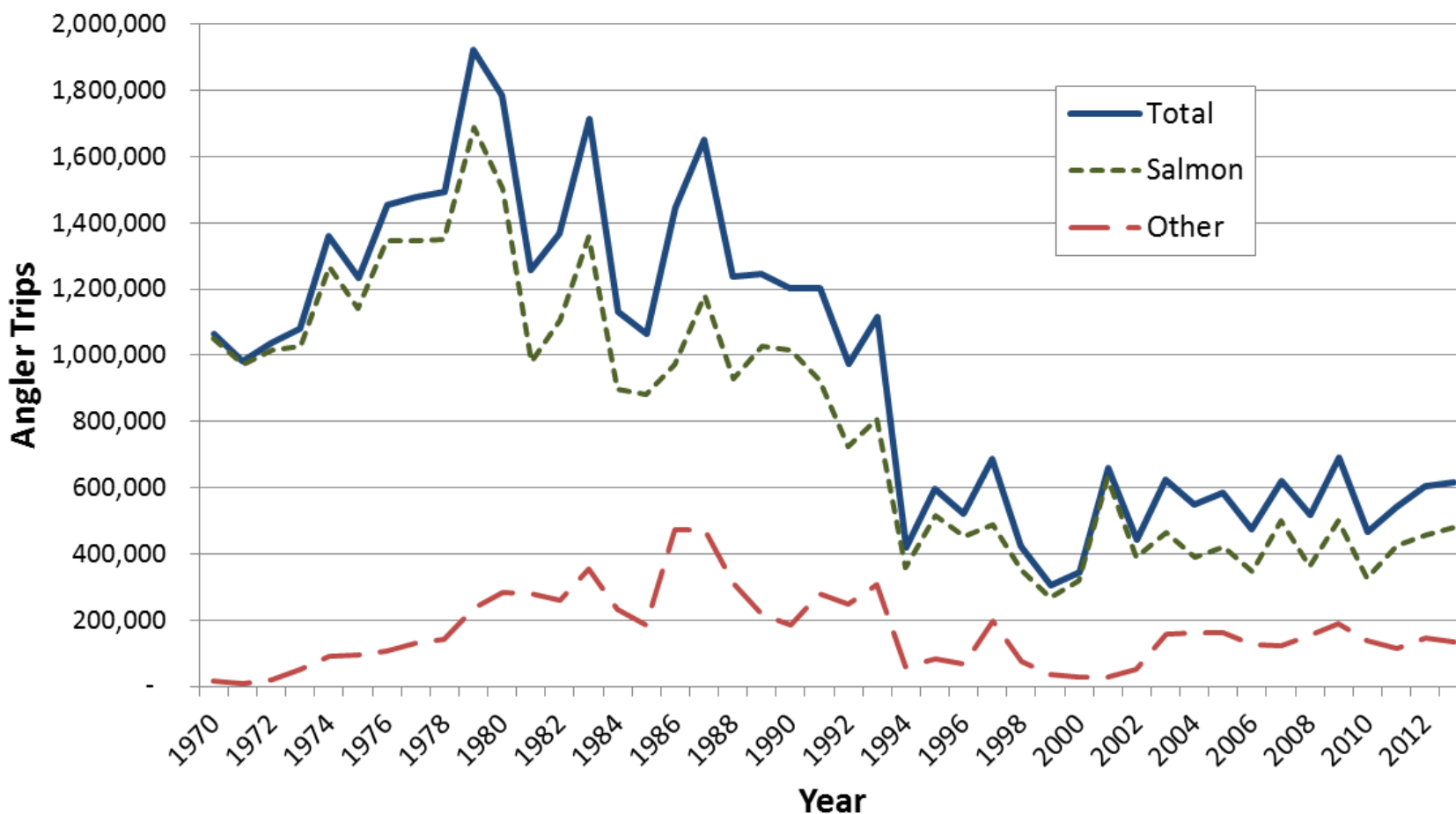
- Background
- Current Program
- Goals, Strategies and Objectives
 - Performance Measures - update
- Next Steps





Background

Historical Puget Sound Recreational Angling Trips (Days)





Background

In 1993, the Legislature created the Puget Sound Recreational Salmon and Marine Fish Enhancement Program. (PSRFE or Program) (RCW 77.105.005)

- Recognized that recreational fishing opportunities had been dwindling for salmon and marine fish.
- Investments made in recreational fishing programs would repay the people of the state many times over in increased economic activity and improved quality of life.
- Intent: improve recreational fishing opportunities from current levels and increase the economic benefits from the fishery
 - Unique recreational experience provided by the winter salmon fishery
 - Number of angler trips is the measure of fishing opportunity



Background

- **Department Responsibilities, per 1993 legislation:**
 - 3 million yearling Chinook in Puget Sound
 - Solicit support from cooperative projects
 - Research on salmon production opportunities
 - Bottomfish research
 - Implement enhancement efforts
 - Utilize hatchery programs to improve recreational fishing
 - Provide WDFW-designated Program Coordinator



Background

- **In 2003, SSB 5062 created the Oversight Committee:**
 - 7 members – broad representation of sport fishing organizations and communities
 - Members serve two-year terms without compensation; may be reappointed
 - Meet at least quarterly
 - Advise the department on all aspects of PSRFE
 - Review and provide guidance
 - Annual budget
 - Proposed enhancement of marine fish and salmon species



Background

- **Adopted in 2011 legislative session:**
 - Remove production goal (3 million Chinook yearlings) and focus on performance-based goals
 - Delayed-release expensive, low survival rates = high cost/fish
 - Could not achieve the 3 million release goal
 - Establish outcome-oriented goals and objectives
 - Align with Hatchery Scientific Review Group (HSRG) recommendations
 - Evaluate effectiveness of the program
 - Establish angler-trips as the primary metric for evaluation
 - Annual reports to the FW Commission and biennial reports to the Legislature



Background

PSRFE Funds:

- Annual surcharge of \$10 for recreational fishing in Puget Sound Marine Areas and Lake Washington began in 1994
- Funds deposited in the enhancement account (Wildlife Fund)
- \$1.1 million to \$1.8 million annually
- In 1998, funding became a percentage of each saltwater and combination fishing license sold



Background: PSRFE Budget

Annual Budget Planned, 2013-15 BN:

Activity	Annual Budget
Hatchery Production	\$974,476
Fish Health Monitoring and Treatment	\$42,378
Lake Washington Sockeye Locks Counts	\$10,108
Coded Wire Tagging	\$108,185
Coordinator	\$46,992
Indirect/Overhead	\$128,547
Total Projected Expenditures	\$1,310,686



Puget Sound Recreational Salmon and Marine Fish Enhancement Program

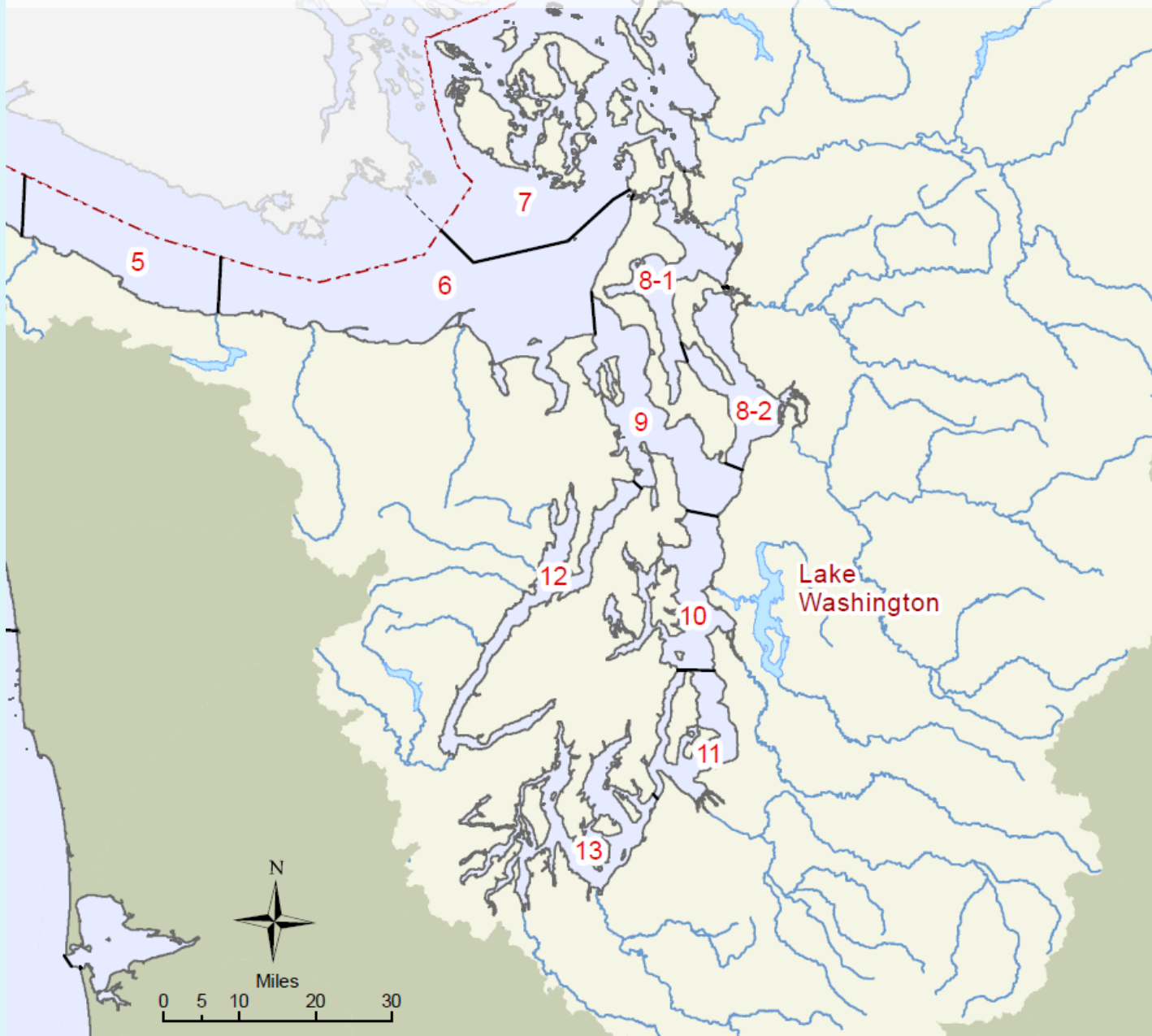
Program Background

- Oversight Committee Members
- Subcommittees:
Hatchery Evaluation, Legislative, Alternative Funding

Dave Knutzen, Olympia - Chair	David Puki, Seattle
Erik Anderson, Seattle	Norm Reinhardt, Port Orchard
Steve Chamberlin, Oak Harbor	Brett Rosson, Anacortes
Don Freeman, Olympia	Michael Rian, Seattle
Mike Gilchrist, Federal Way	Art Tachell, Tacoma
James Malcolm, Mt. Vernon	Gregg Williams, Edmonds
Troy McKelvey, Port Townsend	



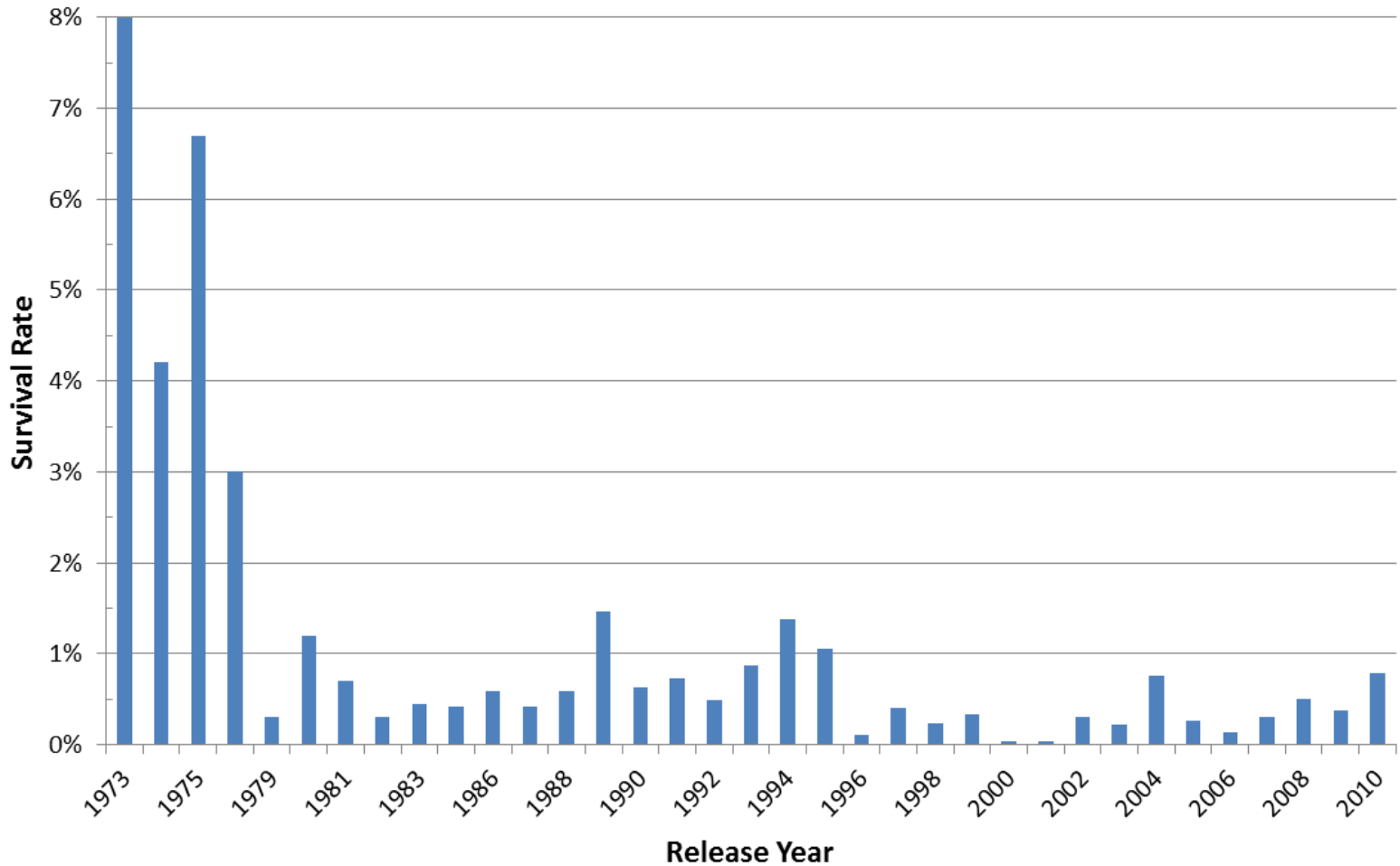
Puget Sound Recreational Salmon and Marine Fish Enhancement Program





Survival Rate

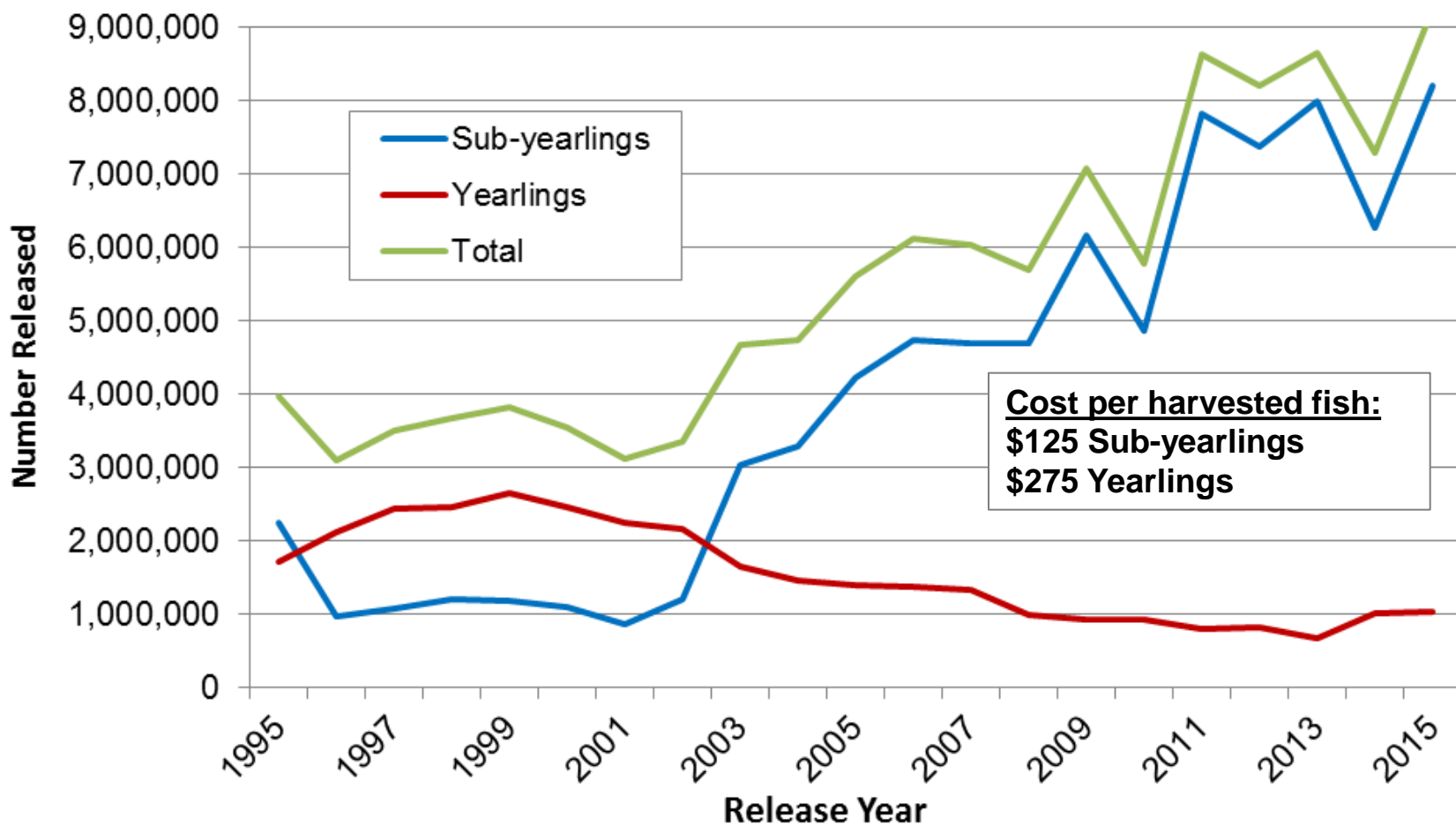
Survival Rate of Puget Sound Summer/Fall Chinook





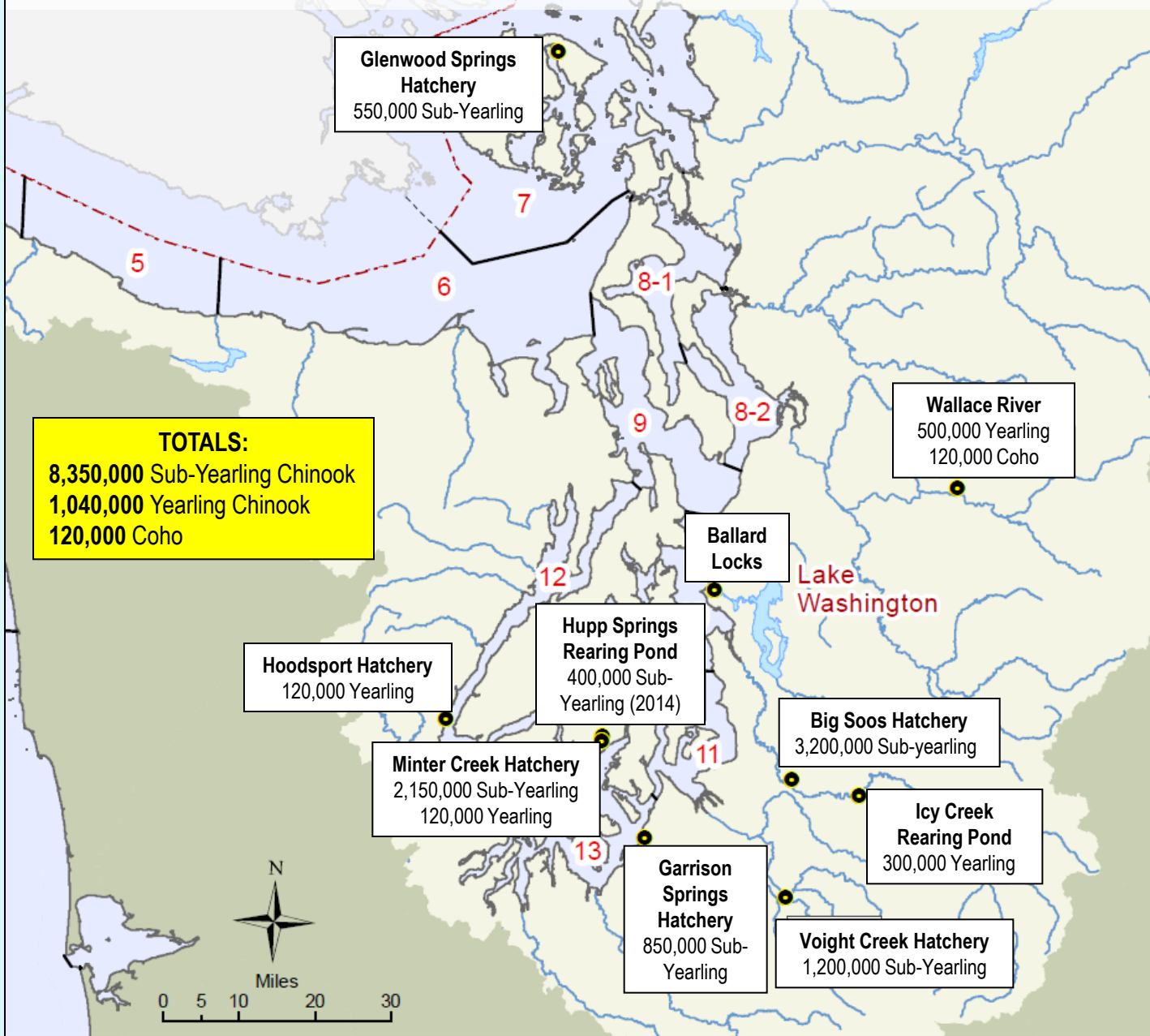
Production Goals Shift for PSRFE Chinook Releases

Puget Sound Chinook Produced with PSRE Funding





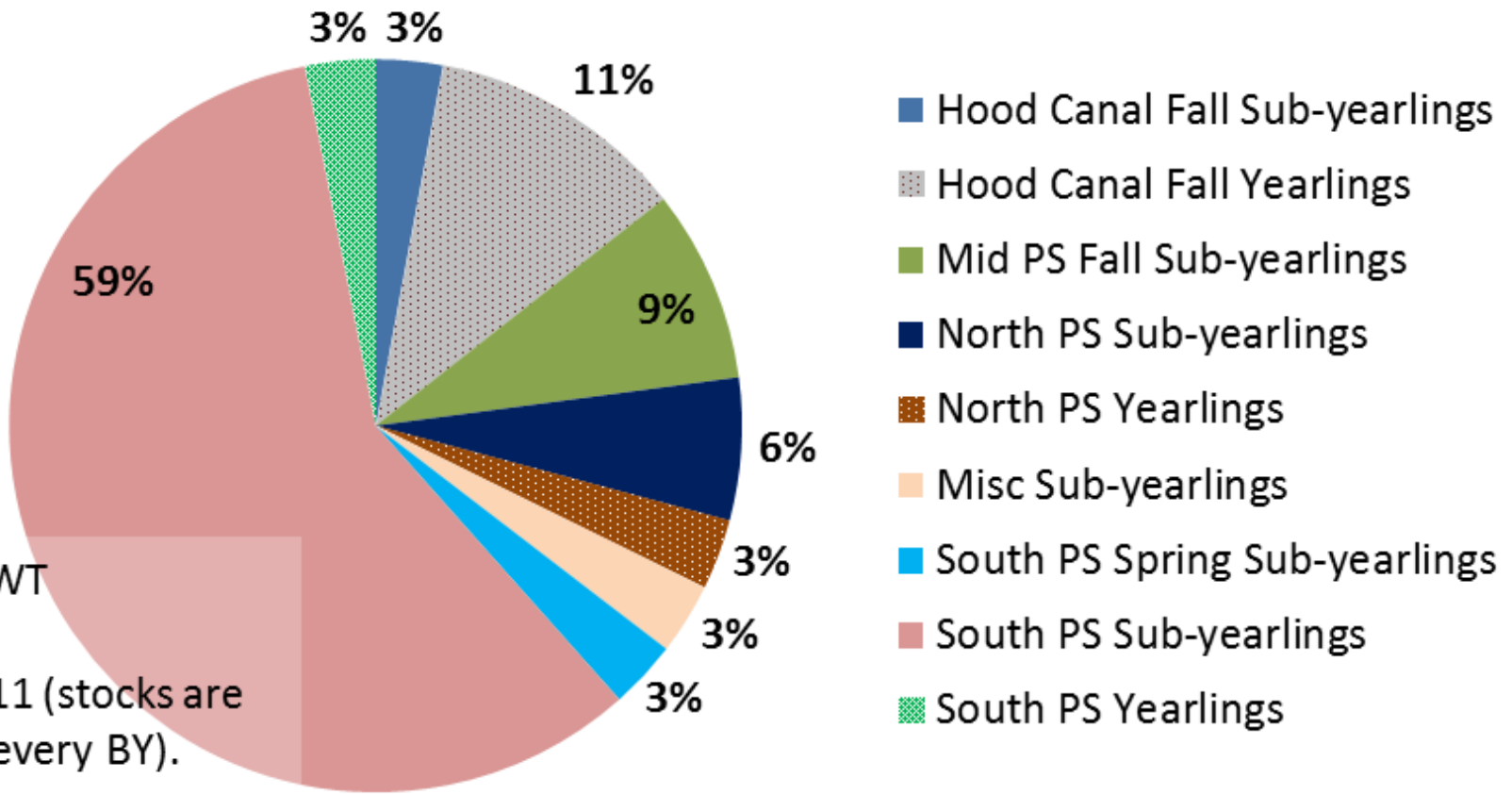
Puget Sound Recreational Salmon and Marine Fish Enhancement Program Funded Facilities





Example: Contribution of PSRFE Fish to Winter Recreational Fisheries

Area 11 Winter Origin of Hatchery Harvest



Based on CWT Recoveries. BY's 2006-11 (stocks are not tagged every BY).



Goals, Strategies and Objectives

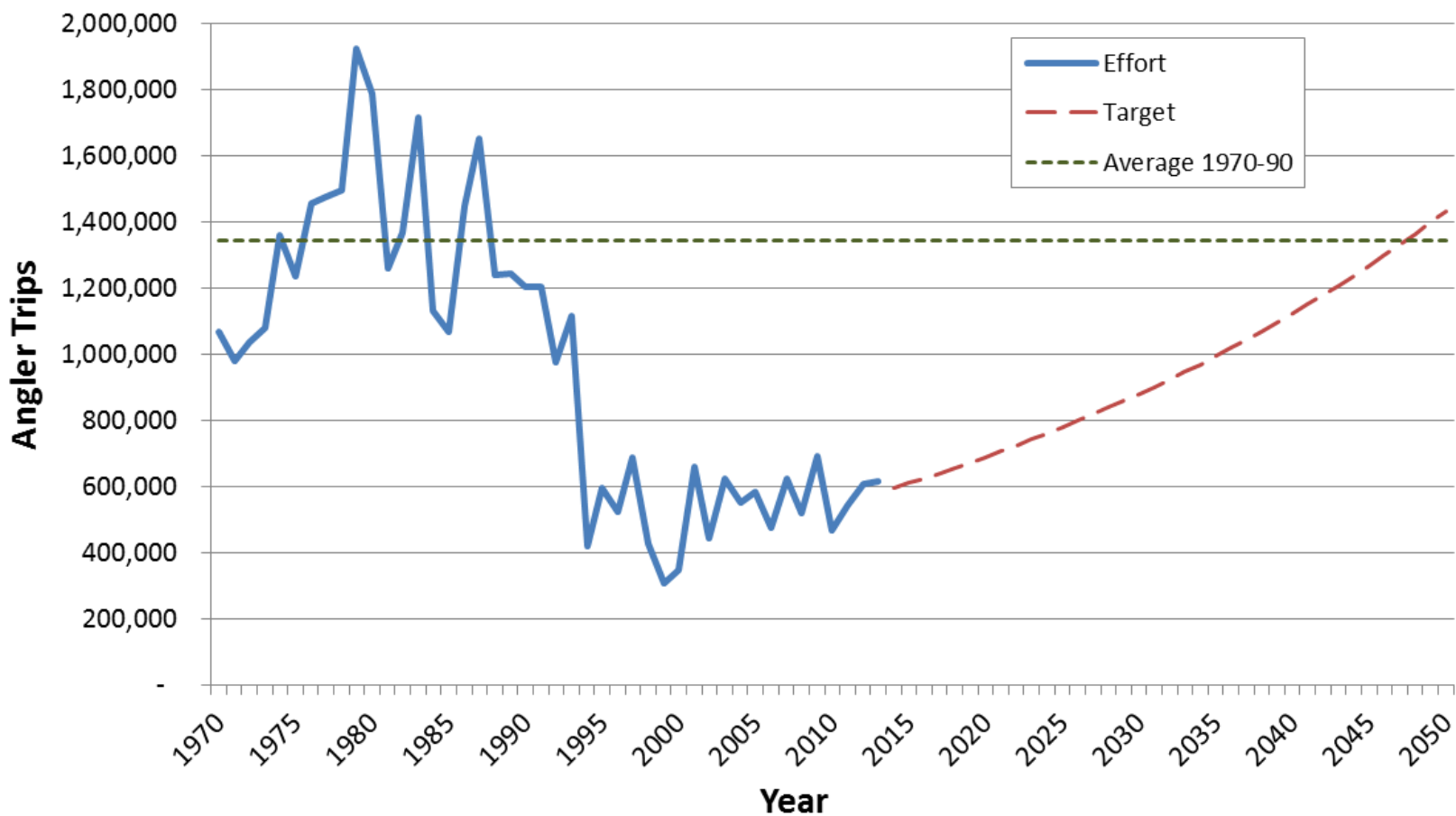
Goals and Objectives adopted in Feb 2013

- “The purpose of the PSRFE is to conserve, enhance, and promote recreational fisheries within Puget Sound and Lake Washington.”
- Program Goal:
 - Improve recreational fishing opportunities
 - Increase the economic benefits
- Outcome Performance Measure:
 - Increase angler trips by 5% per biennium



Goals, Strategies and Objectives

Puget Sound Recreational Angling Trips (Days) and PSRFE Target





4 Key Strategies

- Increase effectiveness of hatcheries
- Improve marketing and remove obstacles
- Improve bottomfish fisheries
- Stabilize and enhance resources





Increase Effectiveness of Hatcheries

Objectives:

- Review salmon production programs and facilities in Puget Sound to better understand their capabilities, limitations, and ways to increase the contribution rate.
- Minimize the cost/fish of hatchery salmon caught in Puget Sound marine fisheries.
- Evaluate potential to improve fishing opportunities with artificial production of other salmon species (e.g., coho).
- Increase the survival of Lake Washington sockeye.



Increase Effectiveness of Hatcheries

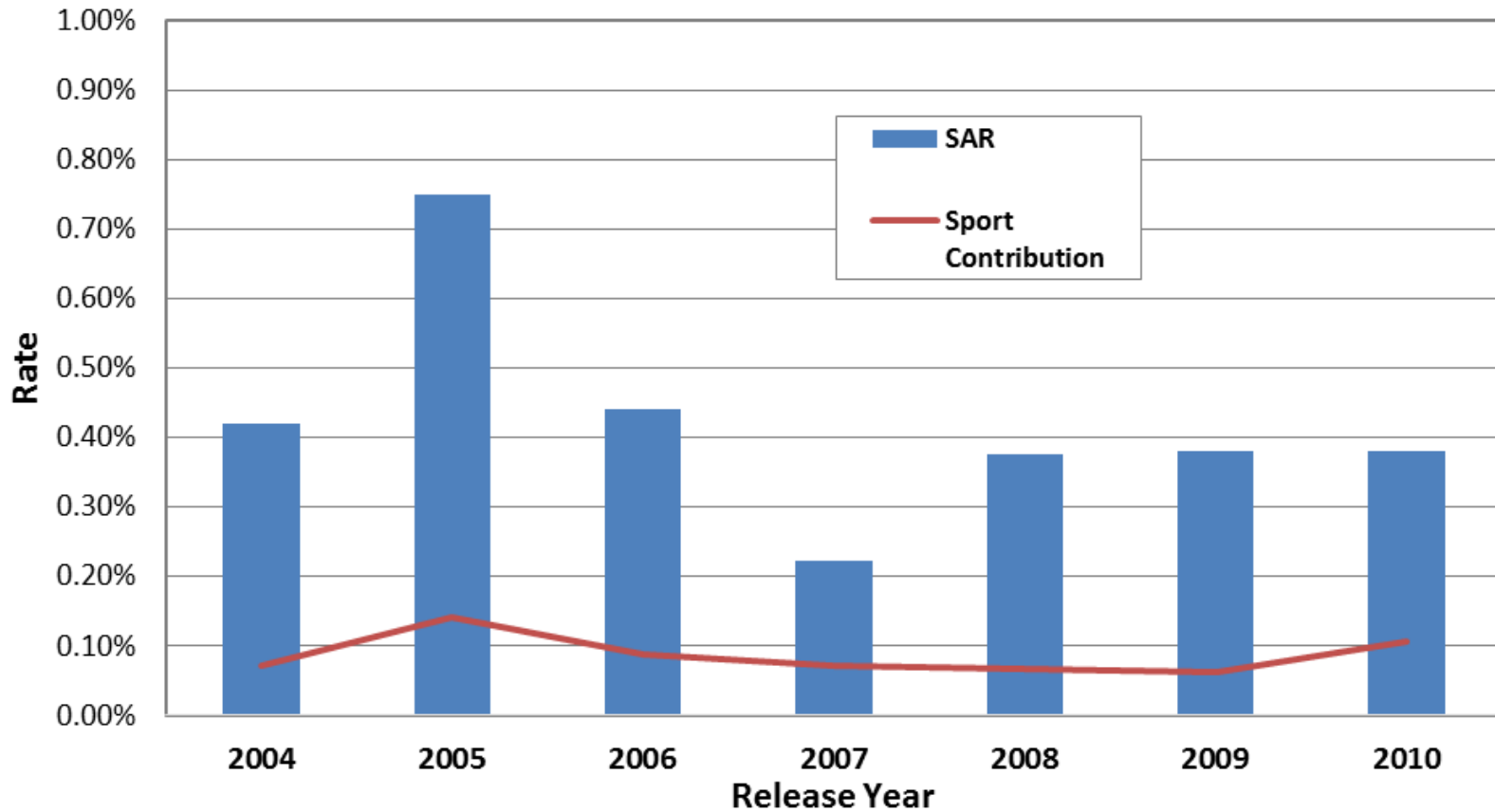
Performance Measure - Progress Made:

- Draft report completed in 2014
 - Calculates and summarizes survival rates, contribution rates, and cost/fish for all hatcheries.
 - This information will be used in the next few months to maximize hatchery performance.



Survival to Adult Return (SAR) and Sport Fishery Contribution Rate

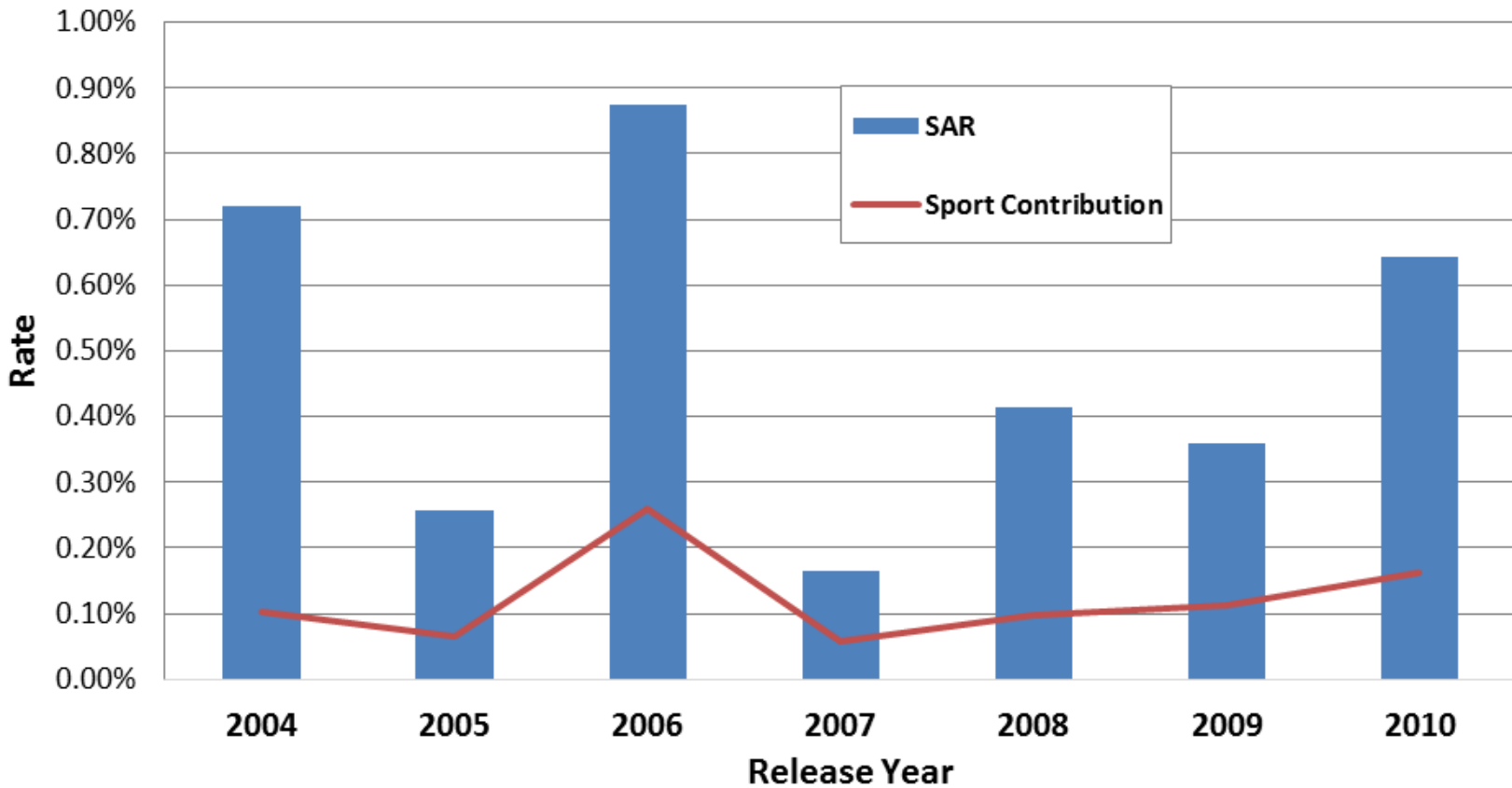
Sub-yearling Summer/Fall Chinook SAR & Sport Contribution Rate





Survival to Adult Return (SAR) and Sport Fishery Contribution Rate

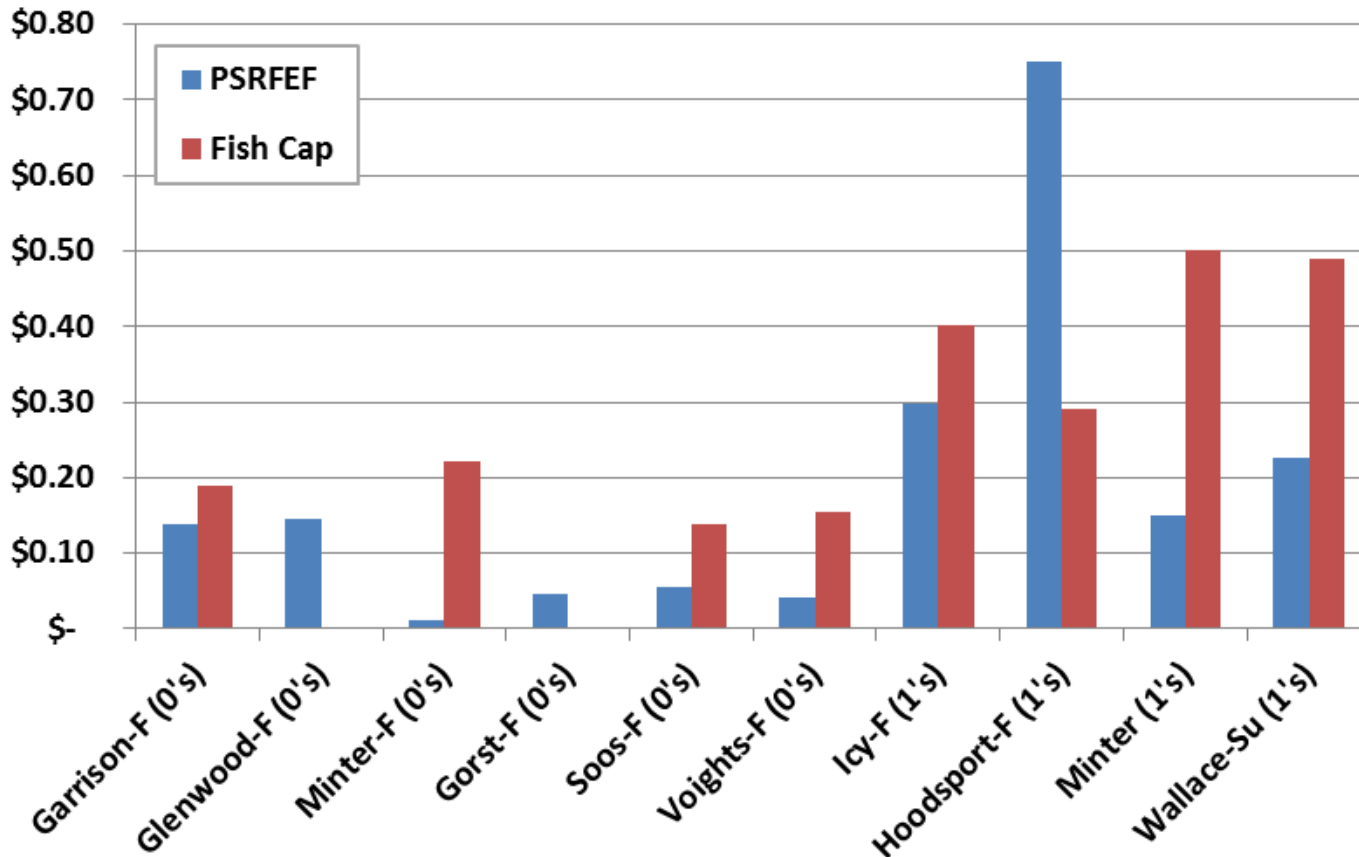
Yearling Summer/Fall Chinook SAR & Sport Contribution Rate





Cost per Fish

Chinook cost/fish produced comparison for FY 2012 actual costs





Improve marketing and remove obstacles

Objectives:

- Increase awareness of opportunities supported by PSRFE (10% increase in awareness per biennium).
- Develop marketing tools to encourage participation and educate new anglers.
- Promote fisheries on healthy stocks that are currently underutilized (e.g. chum, dogfish, cutthroat).



Improve marketing and remove obstacles

Progress Made - New Tools, Outreach:



Sport Shows

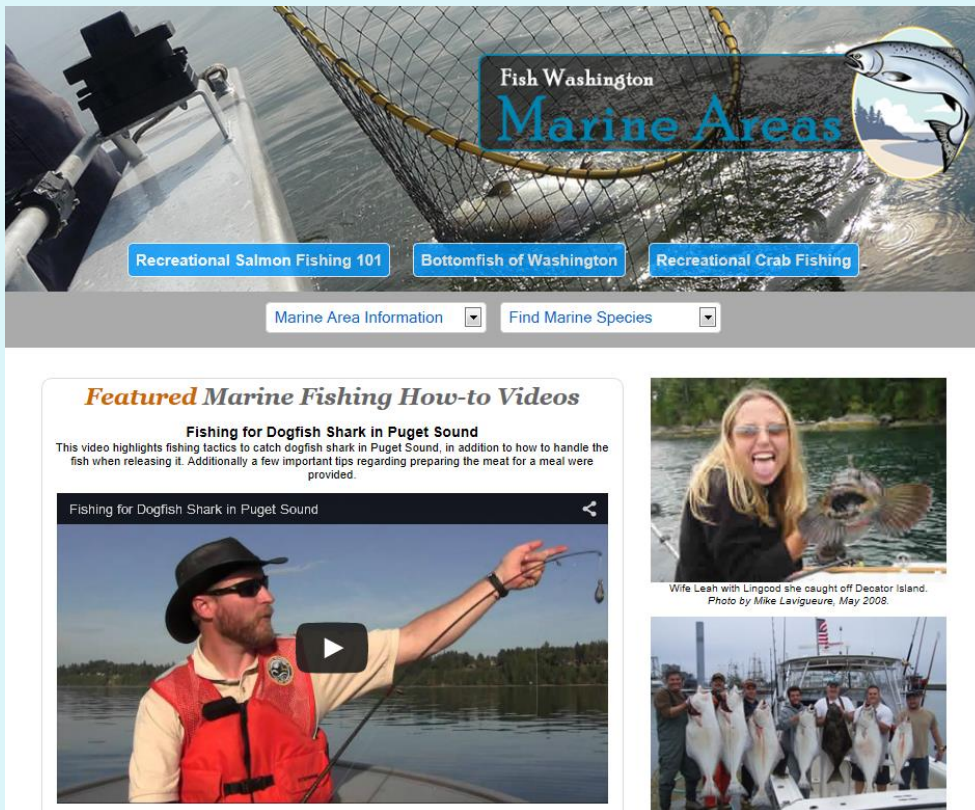


JBLM Clinics



Improve marketing and remove obstacles

Progress Made - New Tools, Outreach:



Fish Washington Web Site



Instagram



Improve marketing and remove obstacles

Progress Made - New Tools, Outreach:

Videos: Chinook, dogfish, chum, pink
In progress: cutthroat



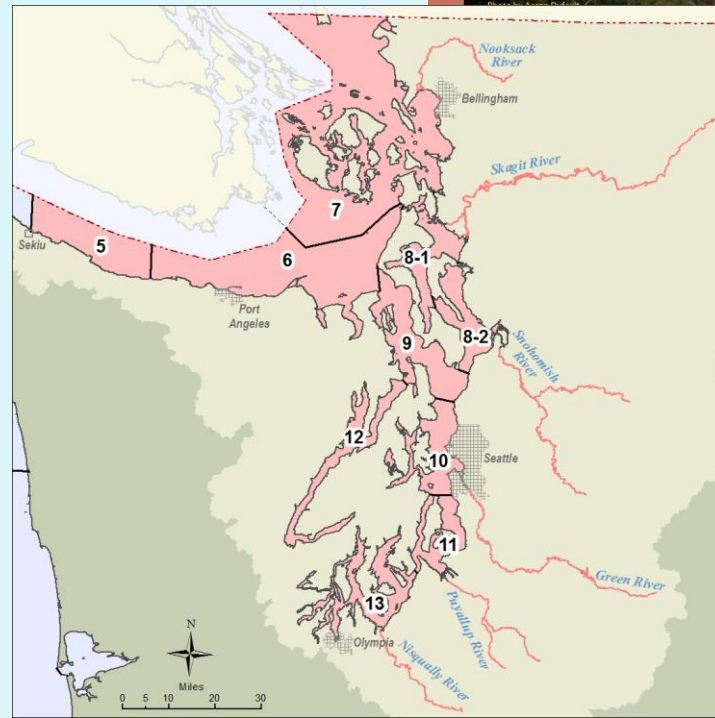
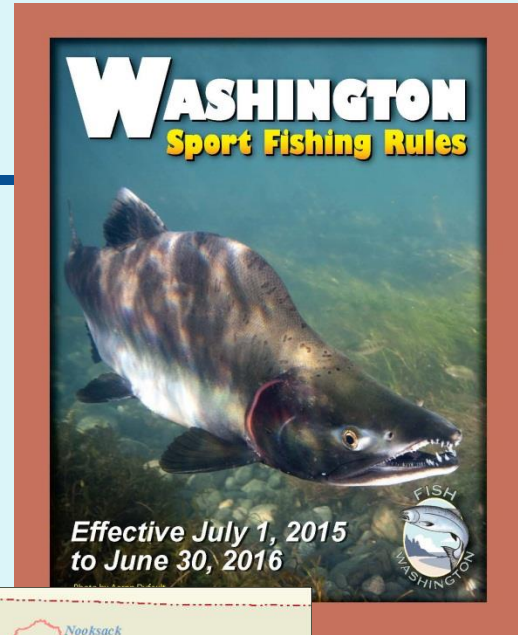


Improve marketing and remove obstacles

Pink salmon outreach - 2015

Fish Washington web site add-on

- Interactive map
- When, where, how
- Videos





Improve marketing and remove obstacles

Survey – Public knowledge of PSRFE Program

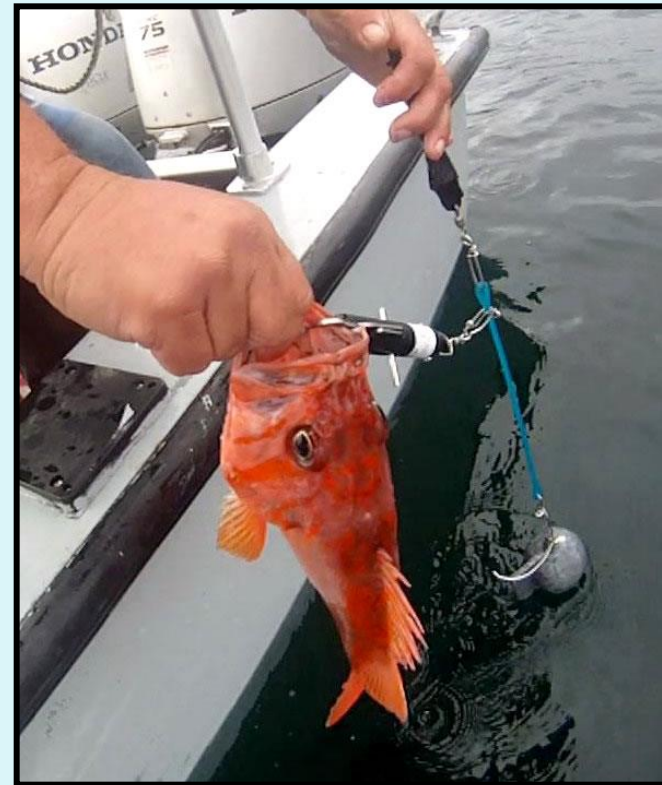
- Online non-random survey – January-March 2014
- Incentive - rod and reel give-away; in conjunction with sport shows, social media, and news release
- 1,893 Sample Size
- Metrics: geographic region, funding, projects, species
 - 30% average awareness



Improve recreational bottomfish fisheries

Objectives:

- Support research to evaluate the risks and uncertainties associated with culture of bottomfish and artificial habitats.
- Use outreach and education to decrease mortality on rockfish.

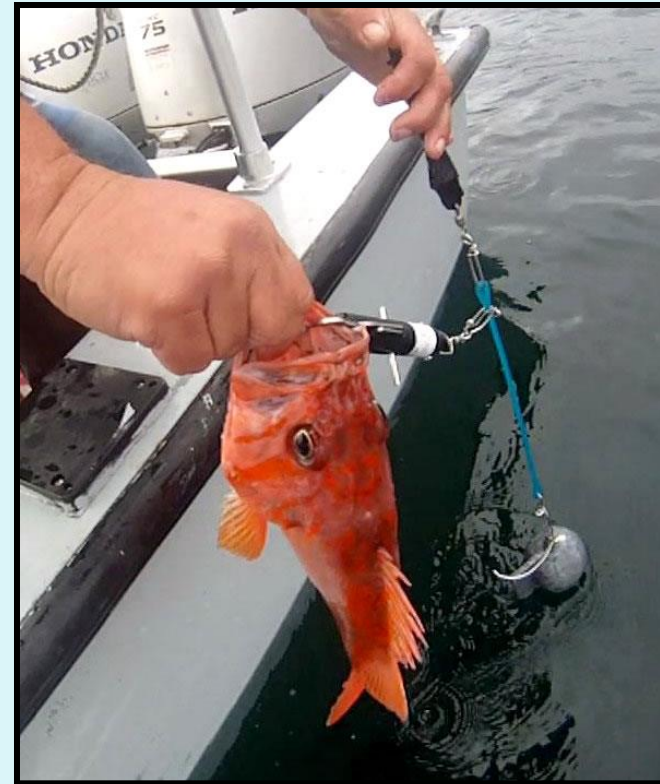




Improve recreational bottomfish fisheries

Progress Made – Rockfish Descender Device Survey, via dockside angler interviews

- Marine Areas 5-13
- Initial sampling period: May-June 2013
- Result: 6% use descending device when releasing a rockfish
- 2015 Sampling: May-September





Stabilize and Enhance Resources

Objectives:

- Increase the number of licensed anglers that fish in Puget Sound and Lake Washington.
- License fees and contribution rate of enhancement funds are adjusted regularly to reflect the cost of living.
- Pursue alternative funding sources.



Stabilize and Enhance Resources

Performance Measures - Progress Made for JBLM:
Increased license sales in 2014 (6,613) compared to two prior even years (4,790):

<u>License Type</u>	<u>% Change 2014</u>
Freshwater	26
Combination	44
Saltwater	1
Temporary	14
Miscellaneous	18
Total	29



Increase Effectiveness of Hatcheries - Next Steps

Performance Measures:

- Report completed in 2015 that evaluates production of other species for cost/benefit ratio, timing of fishing opportunities, and ability to attract and retain new or lapsed anglers.
- Report completed in 2015 that identifies alternative sockeye rearing strategies to increase survival rate of Lake Washington Sockeye.



Improve marketing and remove obstacles – Next Steps

Performance Measures

- Identify underutilized fish stocks in Puget Sound in 2015 (already on this: flounder, cutthroat, chum, pink).
- Develop 5 new tools in 2017 to increase awareness of opportunities (already on this: clinics, website, Instagram, etc.).



Improve recreational bottom-fish fisheries – Next Steps

Performance Measures:

- Report completed in 2015
 - Synthesizes studies to date on lingcod culture
 - Provides recommendations for future
- Improve angler identification of rockfish species by 50% (due in 2017)
- Increase use of descender tools on rockfish to 50% of the encounters (due in 2017)
- Decrease angler encounters of rockfish by 10% (due in 2017)



Conclusions



PSRFE Program Value:

- 42,000 Chinook catch in Puget Sound annually (2013)
- 29% sport Chinook fishery catch in Puget Sound from PSRFE program
- 481,000 salmon angler trips annually
- Economic Impact to the State: \$30 million in value
 - TWC Economics report, T. Wegge
 - Adjusted value: \$63/angler trip

Questions?

