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**A Programmatic Review of the Sport Fish Division  
Statewide Harvest Survey: Phase I Recommendations  
of the Statewide Harvest Survey Review Team**

by

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April 2007

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



## Symbols and Abbreviations

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<b>Weights and measures (metric)</b>		<b>General</b>		<b>Measures (fisheries)</b>	
centimeter	cm	Alaska Administrative Code	AAC	fork length	FL
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	mid-eye-to-fork	MEF
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	mid-eye-to-tail-fork	METF
hectare	ha	at	@	standard length	SL
kilogram	kg	compass directions:		total length	TL
kilometer	km	east	E		
liter	L	north	N	<b>Mathematics, statistics</b>	
meter	m	south	S	<i>all standard mathematical signs, symbols and abbreviations</i>	
milliliter	mL	west	W	alternate hypothesis	H <sub>A</sub>
millimeter	mm	copyright	©	base of natural logarithm	<i>e</i>
		corporate suffixes:		catch per unit effort	CPUE
<b>Weights and measures (English)</b>		Company	Co.	coefficient of variation	CV
cubic feet per second	ft <sup>3</sup> /s	Corporation	Corp.	common test statistics	(F, t, $\chi^2$ , etc.)
foot	ft	Incorporated	Inc.	confidence interval	CI
gallon	gal	Limited	Ltd.	correlation coefficient (multiple)	R
inch	in	District of Columbia	D.C.	correlation coefficient (simple)	r
mile	mi	et alii (and others)	et al.	covariance	cov
nautical mile	nmi	et cetera (and so forth)	etc.	degree (angular)	°
ounce	oz	exempli gratia	e.g.	degrees of freedom	df
pound	lb	(for example)		expected value	<i>E</i>
quart	qt	Federal Information Code	FIC	greater than	>
yard	yd	id est (that is)	i.e.	greater than or equal to	≥
		latitude or longitude	lat. or long.	harvest per unit effort	HPUE
<b>Time and temperature</b>		monetary symbols		less than	<
day	d	(U.S.)	\$, ¢	less than or equal to	≤
degrees Celsius	°C	months (tables and figures): first three letters	Jan, ..., Dec	logarithm (natural)	ln
degrees Fahrenheit	°F	registered trademark	®	logarithm (base 10)	log
degrees kelvin	K	trademark	™	logarithm (specify base)	log <sub>2</sub> , etc.
hour	h	United States (adjective)	U.S.	minute (angular)	'
minute	min	United States of America (noun)	USA	not significant	NS
second	s	U.S.C.	United States Code	null hypothesis	H <sub>0</sub>
		U.S. state	use two-letter abbreviations (e.g., AK, WA)	percent	%
<b>Physics and chemistry</b>				probability	P
all atomic symbols				probability of a type I error (rejection of the null hypothesis when true)	α
alternating current	AC			probability of a type II error (acceptance of the null hypothesis when false)	β
ampere	A			second (angular)	"
calorie	cal			standard deviation	SD
direct current	DC			standard error	SE
hertz	Hz			variance	
horsepower	hp			population	Var
hydrogen ion activity (negative log of)	pH			sample	var
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

***SPECIAL PUBLICATION NO. 07-09***

**A PROGRAMMATIC REVIEW OF THE SPORT FISH DIVISION  
STATEWIDE HARVEST SURVEY: PHASE I RECOMMENDATIONS OF  
THE STATEWIDE HARVEST SURVEY REVIEW TEAM**

by

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## **ABSTRACT**

A team composed of staff members representing the three management regions, Research and Technical Services, Habitat, and Headquarters of the Alaska Department of Fish and Game, Sport Fish Division (SFD) met during October 2004 through June 2005 to review and make recommendations for updating the Statewide Harvest Survey (SWHS) program. The team developed and prioritized a list of information needs from data that could be reasonably collected from a statewide survey of recreational anglers in Alaska. Information needs were then categorized by the type of survey necessary to meet the need, relative to the current Statewide Harvest Survey program. A purpose statement for the SWHS program was developed as well as a list of short and long term recommendations for changes to the program to meet identified needs. The existing SWHS continues to meet many of the highest priority needs of the SFD, but does not address many current needs that were not envisioned when the current SWHS was first implemented in 1977. For example, the need for daily and annual bag limit analyses on a statewide or regional basis is not adequately met by the current SWHS. Moreover, the current SWHS does not address the need to link angler demographics, attitudes, and behavior with angler effort and harvest. While many improvements can be made to the current SWHS program to fully meet additional information needs, significant changes to the survey design, survey instrument, and methods of survey delivery will not be possible without improvements to sport fish licensing data capture. Any future implementation of a statewide survey of anglers will have to address the issues of angler recall; reducing complexity and length of the survey instrument(s); improving response rate; improving fish species identification; improving site selection; and, modernizing the survey delivery, data collection, and data management systems.

Key words: Statewide Harvest Survey, program review, information needs, prioritization, strategic planning

## **INTRODUCTION**

The Statewide Harvest Survey (SWHS) program was initiated in 1977 by the Sport Fish Division (SFD) of the Alaska Department of Fish and Game as a postal survey of anglers to estimate annual harvest and participation (effort) in recreational fisheries. Mills (1979) best summarized the need and benefits of such a program 27 years ago:

Meeting public demand for recreational fishing opportunities in Alaska while at the same time maintaining and protecting the fishery resources has become increasingly complex. In the early years of statehood – before rapid population expansion and industrial development – good, uncrowded sport fishing was accessible; large sport fisheries were few and easily monitored; and sport fishing was considered to be a minor factor in management of commercially exploited species.

Today along with increasing tourism and forest, mineral, petroleum, and associated government development has come a mushrooming recreationally-oriented population. Accessible sport fisheries have become crowded, new fisheries have developed, and pressure from a large mobile population is spilling ever farther afield. Native land allotments, (d)(2) national interest land legislation, the issue of subsistence, state legislated land conveyance quotas, and problems of access have complicated maintenance and expansion of sport fishing opportunities. The State and private corporations have made substantial commitments to aquaculture and hatchery propagations. Also, recreational fishing is now a significant factor in total fisheries management, especially in Cook Inlet where vociferous sport-commercial-subsistence user conflicts have developed.

Against this backdrop, a statewide data base providing information on where sport fishing occurs, the extent of participation, the preferences of the participants, and

the species and numbers of major game fishes being harvested is essential for regulation and management of Alaska's sport fisheries and for total regulation, management, and allocation of multiple-use fisheries. In addition, this information is needed for establishing priorities; for formulating policies; for planning and evaluating rehabilitation, enhancement, hatchery, stocking, habitat protection, and access acquisition projects; for stock assessment; for forecasting; for gauging the economic and social significance of sport fishing; and for satisfying requests for information from individuals, special interest groups, government agencies, and the recreational industry.

Because of Alaska's vastness, meeting all these data requirements statewide by on-site creel censuses would be prohibitively expensive, thus an economical supplementary program has become necessary. Described herein is the beginning of that program.

Mills (1979) was correct in his assessment of the need for information from recreational anglers. Moreover, the need for and amount of this information has grown significantly since 1977. Total sales of recreational fishing licenses in 1977 were 177,734 with 55,821 licenses sold to non-resident anglers (Jennings et al. 2006). Participation statewide in 1977 was 1,197,590 angler-days (Mills 1979). In 2003, there were 477,769 total licenses with 289,358 sold to non-residents (Jennings et al. 2006); a 169% and 418% increase in total and non-resident sales, respectively. Participation statewide in 2003 was 2,219,398 angler days (Jennings et al. 2003), an 85% increase since 1977. While there have been many changes to the SWHS program since its inception in 1977, during the mid-1990's many staff in the SFD were of the opinion that the program was no longer meeting their needs and required a thorough review and possible change in survey design, survey instrument, delivery mechanisms, and analysis. This report details the first phase of such a review.

## **BACKGROUND**

An initial review of the SWHS program was conducted in early 2000. As a result of the review, the Statewide Harvest Survey Working Group (SWHS-WG) was formed during the winter of 2001-2002 to address the following goals:

- provide regional and headquarters input in regards to questionnaire design modifications for each year's survey; and
- provide feedback and in some cases resolution to a number of issues related to the data processing, analysis, and reporting of each year's survey.

During the program review a longer-term need to strategically plan for the future of the survey was also identified in order to address an increase in requests for a wide variety of information for which the SWHS was not originally designed to address. (e.g., annual bag limit analyses). Development of a strategic plan was not tasked to the working group, although the working group's charge often touched upon strategic issues. In particular the SWHS-WG identified that the SWHS needed to be reviewed and potentially redesigned to address current needs.

The SWHS-WG recommended early in 2003 that a separate group of SFD staff should be identified and direct their energies towards addressing the goal of strategically planning for the future of the SWHS. Accordingly the Statewide Harvest Survey Design Subcommittee (of the SHWH-WG) was initiated in 2003. Representatives from each of the main management regions,



Headquarters, and Research and Technical Services (RTS) staff were identified for participation in the subcommittee. Due to a number of constraints this subcommittee as formed in 2003 never initiated any action, although the need for action still existed. Accordingly, at the July 21, 2004 meeting of the SWHS-WG, the working group decided that either the subcommittee should be reinitiated or a new group be formed to address this ongoing need.

Subsequent to the July 21, 2004 meeting of the SWHS-WG, work on developing the make-up and charge of the new group proceeded, resulting in the establishment of the Statewide Harvest Survey Review Team (SWHS-RT) with the overall goal of strategically planning the SWHS to address the future needs of the Division.

## **PURPOSE OF REVIEW**

The overall purpose of the review and development of the SWHS-RT was to:

1. identify and prioritize current and future information needs potentially obtainable from the SWHS,
2. review the existing SWHS to determine its effectiveness in meeting these needs,
3. make recommendations to the Division Leadership Team (DLT) for redesigning the SWHS if necessary, and then
4. with DLT approval, provide guidance to SWHS project staff in implementing these recommendations.

## **METHODS**

Much of the methodology contained in this report was developed as a charter for the review and SWHS-RT (Appendix A).

## **PROCESS FOR REVIEW**

Although this report only details progress on Phase I of the review, a 3-phase process was developed to address the purpose of the SWHS-RT.

Phase I had the following steps:

1. identify and prioritize the various information needs that SFD managers (and indirectly other management entities, e.g., the Board of Fisheries) have that can be addressed by a survey (or surveys) of the sport-fishing public;
2. review the existing SWHS to determine its effectiveness in meeting the identified/prioritized list of information needs from step 1; and
3. report to the DLT and make recommendations for redesigning the SWHS, if necessary to address the identified/prioritized list of information needs. It is likely that more than one option for redesign will be presented to the DLT.

Phase II has the following steps:

1. if the DLT approves the recommendations of the SWHS-RT for redesign of the SWHS, work with SWHS project staff to develop cost estimates and timelines for the redesign; and
2. identify parts of the SWHS redesign that could occur in stages during the implementation period.

Phase III will address implementation by:

1. providing guidance to SWHS project staff to implement the proposed redesign. Implementation will likely occur in stages as identified in Phase II.

The SWHS-RT used a consensus-building process to develop recommendations and make decisions. Consensus was defined as an agreement reached by identifying the interests of all of the concerned parties and then building a cooperative solution that maximizes the satisfaction of as many of the interests as possible. Each team member entered the process with the intention of working cooperatively with other team members to reach consensus decisions on actions. Although no serious disagreements were encountered during Phase I, the option of developing a “minority report” was made available to dissenting team members if consensus could not be reached.

To initiate the review, the SFD Director issued an introductory email to all division staff informing them of the impending review, team membership and charter, and soliciting the identification of SWHS needs through their representative on the review team (Appendix B). Each SWHS-RT member was responsible for communicating with and representing the priorities and information needs of staff in his or her region.

## **EXPECTED OUTCOMES AND PRODUCTS**

The product of the SWHS-RT was a set of recommendations on potential changes to the SWHS and options for implementing these changes that was presented to the DLT. The recommendations describe potential changes to the survey, reason for the changes, options for implementing these changes, budgetary considerations, timelines, and potential benefits of the proposed changes to the survey. If approved by the DLT, the final outcome of the SWHS-RT will be to provide guidance to SWHS project staff in implementation of a redesigned survey that provides the data needed to meet the informational needs of regional and headquarters staff for proper management of the resource.

## **TEAM MEMBERSHIP**

The team was designed to be inclusive of the primary fishery managers within the SFD from a regional and headquarters perspective, with the restriction that representation be limited to as few individuals as possible in order to ensure continuity and efficiency. The team was representative of staff from each region (Southeast-I, Southcentral-II, Interior-III), and headquarters. Additionally, the “Co-chairs” for the team were identified as Allen Bingham and Robert Clark, of RTS. The team membership was as follows:

- Research and Technical Services **Allen Bingham and Robert Clark**–Co-chairs
- Headquarters: **William Romberg**
- Southeast-I: **Randy Ericksen**
- Southcentral-II: **Robert Lafferty and Matthew Miller**
- Interior-III: **Charles Swanton and Tim Viavant** (serves as back-up to Charles)

**Gretchen Jennings, Kathrin Sundet, and Kirk Brogdon** served as technical representatives to the team, and as such were actively involved in team activities.

## **RESOURCES AND CONSTRAINTS**

Several staff provided professional support and assistance to the SWHS-RT as it developed the identified end-product(s). These include:

- Teri Arnold and Mark Burch, SFD planners coordinated the process and served as technical advisors to the SWHS-RT on planning issues and facilitate the meetings;
- Janet Hall Schempf, SFD-Region V habitat biologist served as meeting recorder;
- Kurt Kamletz, SFD-RTS Information Technology staff served as the technical representative of the SWHS project;
- Tammy Wettin, SFD-RTS SWHS project staff, provided technical support (e.g., answer technical questions) on an as-needed basis.

Phase I meetings occurred during October 2004 through June 2005. During the review, communication with the DLT, and feedback from the DLT occurred through Robert Clark, the project supervisor of the SWHS and a member of the SWHS-RT and DLT.

## **RESULTS**

### **REVIEW TEAM PROCESS**

The SHWS-RT met four times in Anchorage during Phase I of the review (October 12, 2004; December 7, 2004; February 1, 2005; and, June 7, 2005). Agenda's for each of the four meetings are in Appendix C. In addition to these face-to-face meetings there were numerous instances where the SWHS-RT utilized email for reviewing and revising meeting notes, draft products from the review process; and, developing rankings or other methods of prioritizing the needs list.

### **REVIEW TEAM OUTCOMES AND PRODUCTS**

Along with short and long-term recommendations for revising the SWHS program, the SWHS-RT developed two major products from the four Phase I meetings. These two products are a purpose statement for the SHWS program and a prioritized list of regional needs along with categories for implementing each need within the SWHS program.

### **SWHS Purpose Statement**

During the program review it became apparent that a well-defined purpose statement for the SWHS program was needed to confirm that the information needs identified should actually be addressed within the SWHS or should be addressed in another program in SFD. The SWHS-RT began by looking at the existing project synopsis for the SWHS, which is the contractual document with the USFWS Federal Aid in Sport Fish Restoration for funding the SWHS (Appendix D). The sole objective of the current SWHS program is to estimate participation, catch, and harvest for major Alaska sport-caught species statewide, by area, and by fishery such that statewide estimates of participation and harvest will be within 15% of actual values 95% of the time. However, the SWHS-RT recognized that 1) estimates of harvest, catch, and effort are rarely made by fishery; 2) additional information (e.g., guided versus unguided harvest at a location) is provided annually as requested by staff; and, 3) specific information (e.g., an analysis of the frequency of annual harvests of a specific species by households fishing at a specific location or aggregation of locations) is provided on a periodic or opportunistic basis as requested by staff and other stakeholders.

Based on discussion of the synopsis, actual needs met by the current SWHS, and unmet needs that could be met, the SWHS-RT developed the following purpose statement:

The SWHS plays a strategic role in supporting the mission, core values, and desired outcomes of SFD by providing:

1. on an annual basis, accurate and precise estimates of recreational harvest, catch, and participation for the major fish species or species groups statewide, by region and area, and at major fishing locations by area;
2. on a periodic or as-needed basis, accurate and precise estimates of fishery- or area-specific quantities in addition to harvest, catch, and participation that can be estimated from a survey of the angling public, excluding social and economic surveys; and,
3. ongoing technical support to managers who need to integrate SWHS estimates into scientifically sound fishery assessments and management objectives or who need to develop and implement a survey to address fishery- or area-specific information need.

The product of purpose statement #1 does not include estimates broken down by guided/non-guided and resident/non-resident, from personal use or subsistence fisheries, by size of fish, or by season. Some of these breakdowns are or will be supported in another program (e.g., guided harvest).

Other breakdowns could continue to be provided (e.g., resident/non-resident) as technical support to managers (purpose #3).

Decision points in implementing purpose #1 as to what constitutes major species or species groups, areas, and major fishing locations will be determined from the SWHS Program Needs List and Criteria For Prioritizing Needs (in Table 1 of this report).

## **Regional Needs**

A major focus of the SWHS-RT meetings during Phase I was the development and prioritization of information needs. Each regional representative presented a list of needs to the team. The regional lists were combined into a master list of information needs, which was then winnowed down by the team to remove redundant needs. Forty-six information needs were identified (Table 1). Using an informal consensus building approach, the SWHS-RT then prioritized the needs by giving them a score between 1 (highest priority) and 9 (lowest priority). Further discussion of this method of prioritization led to the SWHS-RT adopting a more formal approach; giving each need a set of scores based on a list of criteria for prioritization. These priorities were not meant to replace the consensus-based priorities, but to augment them (Table 1).

The criteria developed to prioritize needs are all essentially Yes/No questions, except for question #5.

1. Does the information need address the Desired Outcomes of the SFD Strategic Plan?
2. Does the Department/Division have the authority to collect information relative to this need?
3. Can the information need be met through the existing SWHS?
4. Is there a statutory or regulatory requirement to collect this information?
5. What proportion of the regions in SFD (1 through 5) have this information need in common?
6. Does the information need fit within the current contractual and staffing constraints of the SWHS?
7. Does the information need not require exceptional recall ability, knowledge, and/or specificity on the part of the respondent?
8. Does the information need not require an increase in the number of pages and/or number of columns of the current SWHS instrument?
9. Can the information need be practically ground-truthed through a program independent of the SWHS?

### **Implementation Categories**

One portion of the charter directed the SWHS-RT to conduct an assessment of the current SWHS relative to its' ability to meet the list of regional information needs. The following categories were proposed by the SWHS-RT to classify each of the needs list items for the purposes of defining how each need could potentially be met:

1. **Can Be Done with the Existing Survey.**

Includes only needs list items that can be met with the survey as currently designed and implemented, that is an annual mail survey of fishing households. Needs list items that are not currently provided by the existing survey may be classified as within this category if meeting the need can be implemented through modifications with data analysis and/or reporting procedures.

Would not include alterations to the basic survey design or modification of the basic survey instrument(s)<sup>1</sup> structure, or implementation of basic design features.

2. **Can Be Done with Substantive Modifications to the Survey Instrument(s) and/or Implementation of Basic Design Features within the Framework of the Existing Survey.**

Includes needs list items that can be met through an annual survey of sport fishing households, but would require modification of the current survey instruments that goes beyond simple changes (such as adding a species or changes to site descriptions or order of asking questions). An example of a “substantive”

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<sup>1</sup> Survey instrument = Questionnaire booklets. Currently defined as the “Standard” and “Supplemental” survey forms.

modification of the survey instrument(s) would be redesigning the current two survey instruments used to develop only one “all-encompassing” instrument (that could for example provide guided-nonguided estimates at all sites).

Also includes needs list items that can be met through modifications of such basic design features as: (1) sample size (e.g., send more surveys to the Other Foreign stratum); (2) definition of household-geographic stratification (e.g., breaking down the Other Foreign stratum into specific country of origin, or the Other USA stratum into separate regions of the country); (3) definition of early/late license sale sampling splits; and, (4) timing of survey mailouts.

Does not include needs list items that can only be addressed by a basic redesign of the existing survey (implementing something other than an annual survey of sport fishing households).

3. **Can Be Done by Major Modification of the Survey’s Study Design.**

Includes needs list items that can only be met through some type of survey other than an annual mail survey of sport fishing households, but would still involve a mailback survey of sport fishing participants with the primary focus of estimating levels of participation (effort), catch, and harvest of sport fish. Examples of the type of redesign that might be used to address needs of this type include: (1) individual angler survey (instead of a household survey), (2) seasonal survey (instead of an annual), and (3) regional survey with different questions/instruments for each region.

Would not include needs list items that can only be addressed by some other type of information gathering method or design, or would be primarily focused on parameters other than participation for and catch and harvest of sport fish. So for example needs list items that can only be met through an economic or a satisfaction surveys would not be included in this category.

4. **Can Be Done by Implementing an Alternate or Additional Survey.**

Includes needs list items that cannot be met by any of the procedures associated with the first three categories.

Examples include: economic surveys, satisfaction surveys, on-site creel surveys, telephone surveys (although a mail survey with a telephone follow-up might be used to address needs in the third category).

The SWHS-RT then classified each of the information needs by implementation category (Tables 1 and 2). Many high priority needs could be met with the existing survey, however there were also many high priority needs that could not be met with the current or a substantive modification of the current SWHS. For example, although 13 high priority (consensus priority of 1-4) information needs could be met or partially met with the existing SWHS, an additional 9 needs could be met or partially met with substantive modification to the exiting survey (Table 2).

## **RECOMMENDATIONS**

### **SHORT TERM RECOMMENDATIONS**

The SWHS-RT gave a report on the results of Phase I of the review to the DLT in August of 2005. Based on the review, the SWHS-RT recommended that the following short term tasks be completed in the next 12 to 18 months:

1. SWHS program staff will continue to execute the SWHS in its present state to meet on-going needs of the SFD
2. SWHS program staff will work with the regions to develop a hierarchy of saltwater locations for use in SWHS survey instruments and reports.
3. SWHS program staff will work with the regions to develop a drainage-based system of freshwater locations for use in SWHS survey instruments and reports.
4. SWHS program staff will work with the regions to develop a training module that can be used to inform management and research staff in the use and application of SWHS estimates.
5. Biometrics staff in consultation with the regions will develop and SWHS program staff will implement standardized methodology for evaluating and assessing annual bag limit data from the current SWHS program.
6. SWHS program and Biometrics staff will develop performance measures and metrics for the current SWHS program. For example, staff will likely develop metrics to ensure that changes in angler demographics, delivery rate, response rate, sample selection, and stratified design of the survey do not degrade performance (accuracy and precision) of the SWHS. These metrics will be described and reported on in the annual Fishery Data Series report of estimates that has been published in the past.
7. SWHS-RT will publish Phase I meeting materials, decision-making documents, and recommendations in a SFD Special Publication (this report).
8. SWHS-RT will, in consultation with SWHS program and Biometrics staff, begin phase II of the Charter for revision of the SWHS Program.

The DLT approved of these recommendations at the August 2005 meeting.

### **LONG TERM RECOMMENDATIONS**

The SWHS-RT also made long-term recommendations to the DLT in August of 2005. The recommendations are:

1. SWHS-RT will meet during the next 12 months to develop options for redesign of the SWHS along with cost estimates and timelines for implementation. Options will minimally include a consideration of:
  - a. Household-based vs. angler-based survey(s)
  - b. Single survey instrument vs. multiple surveys
  - c. Regionally-based vs. statewide survey(s).
  - d. Seasonally-based vs. annual survey(s).

2. SWHS-RT will focus the redesign on long-term issues identified during Phase I as they relate to meeting needs not addressed by the current survey. These issues are: improving angler recall; reducing complexity and length of the survey instrument(s); improving response rate; improving fish species identification; improving site selection; and, modernizing the survey delivery, data collection, and data management systems.
3. SWHS-RT will present options for SWHS redesign and any budget documents necessary by August of 2006 for inclusion in the FY08 budget preparation cycle.

The DLT approved of these recommendations at the August 2005 meeting.

As of the publication date of this report, the SWHS-RT had met to begin Phase II of the review (see Appendix A). The SWHS-RT had decided that a redesigned SWHS program would have to be angler-based instead of household-based to better meet as many information needs as possible. Additionally, the SWHS-RT recommended that timelines and budget documents be prepared for: 1) a substantively modified version of the current household-based survey that meets as many information needs as possible, and 2) a newly designed angler-based survey that meets as many information needs as possible so that the DLT could see the improvements and potential costs of redesigning the SWHS. Since the FY08 budget approval process had already begun in August of 2006, the two survey designs, timelines, and budget documents would be presented to the DLT for their final approval for the FY09 budget process.

## **ACKNOWLEDGEMENTS**

The authors extend their thanks to Mark Burch, Teri Arnold, and Janet Schempf for their help in organizing, facilitating, and note taking of the review team meetings. Thanks also go to Kurt Kamletz and Tammy Wettin for their technical expertise and familiarity with the SWHS program. The SWHS-WG and DLT are also commended for envisioning and authorizing the use of a team approach to facilitate the review of the SWHS program. The review and this report were made possible by partial funding provided by the U.S. Fish and Wildlife Service through Federal Aid in Sport Fish Restoration Act (16 U.S.C. 777-777K) under project F-10-21, Job Number RT-01.

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**Table 1.**—SHWS-RT needs list with consensus priority, prioritization categories, and implementation category.

	Need	Consensus Priority <sup>a</sup>	Prioritization Categories <sup>b</sup>									Implementation Category <sup>c</sup>	
			1	2	3	4	5	6	7	8	9		
1.	Harvest estimates by area and location	1	1	1	1	1	1	1	1	1	1	1	1
2.	Effort estimates by area and location	1	1	1	1	0	1	1	1	1	1	1	1
3.	Catch estimates by area and location	1	1	1	1	1	1	1	1	1	1	1	1
4.	Freshwater estimates sum hierarchically within a drainage on a hydrologically-based definition	2	0	1	1	0	1	1	1	1	1	1	1
5.	Saltwater estimates sum hierarchically within “management” units	2	0	1	0	0	1	1	1	1	1	1	2
6.	Maintain historical base that we have now	2	0	1	1	0	1	1	1	1	1	1	1
7.	Keep reporting level the same as the current survey relative to geography and species	2	0	1	1	0	1	1	1	1	1	1	1
8.	Train staff on the use of data and how it is collected and the estimates calculated	2	1	1	1	0	1	0	1	1	1	1	1
9.	Daily bag limit analyses (frequency distribution of the number of anglers who harvest 0, 1 or more, 2 or more, 3 or more, etc. fish of a particular species within an angler day at an individual or aggregation of sites)	2	1	1	0	1	0.6	0	0	0	1	1	4
10.	Annual bag limit analyses (frequency distribution of the number of anglers who harvest 0, 1 or more, 2 or more, 3 or more, etc. fish of a particular species within one year at an individual or aggregation of sites)	2	1	1	1	1	0.6	1	1	0	0	0	2
11.	Estimates of harvest, catch, and effort by resident and non-resident anglers	2	1	1	1	1	1	1	1	1	1	1	1
12.	Use the “Other” site category only when we do not know where fishing occurred; resolving the issue of unknown versus small fisheries.	3	1	1	0	0	1	1	1	1	0	0	1
13.	Estimates of harvest, catch, and effort by guided and non-guided anglers	3	1	1	1	1	1	1	1	0	0	1	2

-continued-

**Table 1.**–Page 2 of 4.

	Need	Consensus Priority <sup>a</sup>	Prioritization Categories <sup>b</sup>									Implementation Category <sup>c</sup>
			1	2	3	4	5	6	7	8	9	
14.	Estimates of harvest, catch, and effort by foreign and non-foreign anglers	3	0	1	0	0	0.6	1	1	1	1	2
15.	Finalize estimates sooner by improving response timing and turnaround on surveys	3	0	1	0	0	1	0	1	1	0	3
16.	Develop an interactive web-based GIS information retrieval system with information on estimates, standard errors, and confidence intervals	3	1	1	0	0	1	0	1	1	1	4
17.	Address the estimation and reporting of standard errors and confidence intervals	3	1	1	1	0	1	0	1	1	1	1
18.	Estimates of Chinook salmon harvested and released by size (small and large)	3	1	1	1	1	0.2	1	0	1	1	4
19.	Improve the identification of marine species (e.g., rockfishes) and freshwater species (e.g., Dolly Varden) via a website or other form of educational material	3	1	1	0	0	0.4	0	1	0	1	4
20.	Estimates of harvest and effort at freshwater sites on a stock-specific basis	3	1	1	0	0	1	0	0	0	1	4
21.	Estimates of harvest of yelloweye rockfish	3	1	1	0	1	0.4	0	0	0	1	2
22.	Improved estimation of harvest, effort, and catch in small and moderate size fisheries	3	1	1	0	0	0.8	0	1	0	1	2
23.	Estimates of harvest and effort of guided and non-guided anglers by area	4	1	1	0	0	0.6	0	0	0	1	2
24.	Estimates of harvest of black rockfish	4	1	1	0	0	0.4	0	0	0	1	2
25.	Estimate seasonal harvest in addition to annual harvest	4	1	1	0	0	0.6	0	1	0	1	3
26.	Periodic review of the SWHS survey and estimation processes	4	1	1	1	0	1	1	1	1	1	1
27.	Estimate the percentage of allocation objectives achieved in regulatory management plans	4	1	1	1	1	0.6	0	0	0	1	1

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**Table 1.**—Page 3 of 4.

	Need	Consensus Priority <sup>a</sup>	Prioritization Categories <sup>b</sup>									Implementation Category <sup>c</sup>
			1	2	3	4	5	6	7	8	9	
28.	Provide divisional access to individual responses for fisheries with low participation	4	0	1	1	0	0.2	1	1	1	1	1
29.	Estimate the percentage of resident anglers that went personal use fishing	4	1	1	0	0	0.8	0	1	0	1	4
30.	Estimate the percentage of residents that fished primarily with a Personal Use Permit	4	1	1	0	0	0.8	0	1	0	1	4
31.	Quickly estimate harvest, catch, and effort in seasonal fisheries for dissemination to the Board of Fisheries	5	0	1	0	0	0.6	0	1	0	1	4
32.	Estimate harvest and effort of guided and non-guided anglers in more shellfish fisheries than current survey	5	1	1	0	0	0.4	0	0	0	1	2
33.	Estimate the economic output and impact of sport fishing in Alaska	5	1	1	0	0	1	0	0	0	0	4
34.	Estimate the percentage of residents and non-residents that utilize a guide and/or charter	5	1	1	1	0	0.8	0	1	0	1	4
35.	Estimate harvest and/or catch by specified aggregations of households (e.g., local resident versus non-local resident versus non-resident using guide/charter versus non-resident not using guide/charter)	6	1	1	0	0	0.8	0	1	1	1	2
36.	Estimate subsistence harvest via rod and reel	6	1	1	0	0	1	0	0	0	1	2
37.	Develop surveys or modify current survey to address regulation changes	6	1	1	0	0	0.6	0	1	0	1	4
38.	Estimate effort, harvest, and catch of wild and hatchery produced fish on a statewide basis	6	1	1	0	1	1	0	1	0	0	1
39.	Estimate effort by specific user groups that would allow analysis of trends in these groups (e.g., percentage of anglers harvesting at least 1 fish versus those that did not harvest any fish)	6	1	1	0	0	1	0	0	0	0	4

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**Table 1.–Page 4 of 4.**

Need	Consensus Priority <sup>a</sup>	Prioritization Categories <sup>b</sup>										Implementation Category <sup>c</sup>	
		1	2	3	4	5	6	7	8	9			
40. Estimate overall satisfaction with fishing experiences and opportunities	6	1	1	0	0	1	0	1	0	1	0	1	4
41. Collect and report on angler profile information linked to respondents to the SWHS via a separate survey	6	1	1	0	0	1	0	1	0	1	0	1	4
42. Estimate total fishing trips statewide and by region	7	1	1	1	0	1	1	1	1	1	0	0	1
43. Estimate harvest by anglers less than 16 years old	7	1	1	0	1	0.8	0	0	0	0	1	1	4
44. Provide a printed copy of the SWHS report each year	9	0	1	0	0	1	0	1	0	0	1	1	1
45. Estimate harvest and effort in personal use fisheries that do not have a permit	none	1	1	0	0	1	0	1	0	0	0	0	4
46. Maintain consistent location names so that estimates of harvest, catch, and effort are comparable from year to year	none	1	1	0	0	1	1	1	1	1	0	0	1

<sup>a</sup> Consensus priority is the priority (1 = highest, 9 = lowest) given to each need based on the consensus of the review team.

<sup>b</sup> Prioritization categories are: 1 = does the information need address the Desired Outcomes of the SF Division Strategic Plan?, 2 = does the Department/Division have the authority to collect information relative to this need?, 3 = can the information need be met through the existing SWHS?, 4 = is there a statutory or regulatory requirement to collect this information?, 5 = what proportion of the regions in SF Division (1 through 5) have this information need in common?, 6 = does the information need fit within the current contractual and staffing constraints of the SWHS?, 7 = does the information need not require exceptional recall ability, knowledge, and/or specificity on the part of the respondent?, 8 = does the information need not require an increase in the number of pages and/or number of columns of the current SWHS instrument?, 9 = can the information need be practically ground-truthed through a program independent of the SWHS?. Scores are between 0 (not addressed) and 1 (addressed).

<sup>c</sup> Implementation categories are: 1 = can be met with the existing survey, 2 = can be met with substantive modifications to the survey instrument(s) and/or implementation of basic design features within the framework of the existing survey., 3 = can be met by major modification of the survey’s study design, 4 = can be met by implementing an alternate or additional survey.

**Table 2.**—Processes or surveys necessary to meet the SWHS-RT needs arranged in order of implementation category and consensus priority.

Implementation category	Change to current SWHS <sup>a</sup> necessary to meet needs	Consensus Priority									
		1	2	3	4	5	6	7	8	9	None
1	No modifications	1 <sup>c</sup> 2 (3)	6 7		26					44	46
1	Additional post-processing, data analyses, or summarization		4 (10) 11	12 17	27 28		38	42			
2	Modify into a “supplemental” <sup>b</sup> only survey sent to all households			13 (22)	23	32	(35)				
2	Other substantive modifications of survey instrument		5	(21)	(24) (29) (30)	(34)	(36)				(45)
2	Substantive modification of definition of strata and/or sample size allocation			(14)			(35)				
3 or 4	Replace with individual angler-based survey administered annually		(10)								
3 or 4	Replace with individual angler-based survey administered seasonally		(9)	(15)	(25)						
3 or 4	Replace with individual angler-based survey administered seasonally and regionally		(9)							(37)	
3 or 4	Additional survey that meets specific objectives					31		43		37	(45)
3 or 4	Additional survey of opinions/motivations of anglers				29 30	34	39 40 41				
3 or 4	Additional stock-specific use survey				20						
3 or 4	Additional economic survey						33				
3 or 4	Additional on-site creel survey or catch sampling	3	9	21	24 25		(36)	(43)			(45)
None	Separate GIS program				16						
None	Separate staff development efforts		8								
None	Separate public outreach efforts				19						

<sup>a</sup> Current SWHS is the annually administered, household-based statewide harvest postal survey (Jennings et al. 2006).

<sup>b</sup> Supplemental survey is the currently administered supplemental form of the current SWHS (Jennings et al. 2006).

<sup>c</sup> Needs are listed as need number (see Table 1). Needs in parentheses are only partially met.



**APPENDIX A**  
**STATEWIDE HARVEST SURVEY REVIEW TEAM CHARTER**

## Statewide Harvest Survey Review Team Charter

### I. INTRODUCTION

#### BACKGROUND:

A program review of the Statewide Harvest Survey (SWHS) was conducted in early 2000. As a result of the review, the Statewide Harvest Survey Working Group (SWHS-WG) was formed during the winter of 2001-2002 to address the following goals:

- provide regional and headquarters input in regards to questionnaire design modifications for each year's survey; and
- provide feedback and in some cases resolution to a number of issues related to the data processing, analysis, and reporting of each year's survey.

During the program review a longer-term need to strategically plan for the future of the survey was also identified in order to address an increase in requests for a wide variety of information for which the SWHS was not originally designed to address. (e.g., annual bag limit analyses). Development of a strategic plan was not tasked to the working group, although the working group's charge often touched upon strategic issues. In particular the SWHS-WG identified that the SWHS needed to be reviewed and potentially redesigned to address current needs.

The SWHS-WG recommended early in 2003 that a separate group of Divisional staff should be identified and direct their energies towards addressing the goal of strategically planning for the future of the SWHS. Accordingly the Statewide Harvest Survey Design Subcommittee (of the SHWH-WG) was initiated in 2003. Representatives from each of the main management regions, Headquarters, and Research and Technical Services (RTS) staff were identified for participation in the subcommittee. Due to a number of constraints this subcommittee as formed in 2003 never initiated any action, although the need for action still exists. Accordingly, at the July 21, 2004 meeting of the SWHS-WG, the working group decided that either the subcommittee should be reinitiated or a new group be formed to address this ongoing need.

#### STATUS:

Subsequent to the July 21, 2004 meeting of the SWHS-WG work on developing the make-up and charge of the new group proceeded, resulting in the establishment of the Statewide Harvest Survey Review Team (SWHS-RT) with the overall goal of strategically planning the SWHS to address the future needs of the Division.

The following sections of this charter describe the purpose, process, expected outcomes and products, resources and constraints, evaluation, and membership of the SWHS-RT and its potential actions.

### II. PURPOSE

The overall purpose of the SWHS-RT is to (1) identify and prioritize current and future information needs potentially obtainable from the SWHS, (2) review the existing SWHS to determine its effectiveness in meeting these needs, (3) make recommendations to the Division Leadership Team (DLT) for redesigning the SWHS if necessary, and then (4) with DLT approval, provide guidance to SWHS project staff in implementing these recommendations.



### **III. PROCESS**

A 3-phase process will be followed to address the purpose of the SWHS-RT:

Phase One has the following steps:

4. identify and prioritize the various information needs that Sport Fish managers (and indirectly other management entities, e.g., the Board of Fisheries) have that can be addressed by a survey (or surveys) of the sport-fishing public;
5. review the existing SWHS to determine its effectiveness in meeting the identified/prioritized list of information needs from step 1; and
6. report to the DLT and make recommendations for redesigning the SWHS, if necessary to address the identified/prioritized list of information needs. It is likely that more than one option for redesign will be presented to the DLT.

Phase Two has the following steps:

3. if the DLT approves the recommendations of the SWHS-RT for redesign of the SWHS, work with SWHS project staff to develop cost estimates and timelines for the redesign; and
4. identify parts of the SWHS redesign that could occur in stages during the implementation period.

Phase Three - Implementation

Provide guidance to SWHS project staff to implement the proposed redesign. Implementation will likely occur in stages as identified in Phase Two.

#### **DECISION-MAKING PROCESS:**

The SWHS-RT is expected to use a consensus-building process to develop recommendations and make decisions. Consensus is defined as an agreement reached by identifying the interests of all of the concerned parties and then building a cooperative solution that maximizes the satisfaction of as many of the interests as possible. Each member enters the process with the intention of working cooperatively with other team members to reach consensus decisions on actions. In some cases consensus may not be possible. In these cases, team members will document the points of disagreement in a minority report to be included in the appropriate end product or meeting summary. However, it is expected that the SWHS-RT will work diligently to reach consensus on even the most difficult issues.

To initiate the review, the Division Director will issue an introductory email to all division staff informing them of the impending review, team membership and charter, and soliciting the identification of SWHS needs through their representative on the review team. Each SWHS-RT member is responsible for communicating with and representing the priorities and information needs of staff in his or her region.

### **IV. EXPECTED OUTCOMES AND PRODUCTS**

The end product of the SWHS-RT will be a set of recommendations on potential changes to the SWHS and options for implementing these changes to be presented to the DLT. The recommendations will describe potential changes to the survey, reason for the changes, options for implementing these changes, budgetary considerations, timelines, and potential benefits of the proposed changes to the survey. If approved by the DLT, the final outcome of the SWHS-RT will be to provide guidance to SWHS project staff in implementation of a redesigned survey that provides the data needed to meet the informational needs of regional and headquarters staff for proper management of the resource.

## V. TEAM MEMBERSHIP

The team is designed to be inclusive of the primary fishery managers within the Division of Sport Fish from a regional and headquarters perspective, with the restriction that representation be limited to as few individuals as possible in order to ensure continuity and efficiency. The team will be representative of staff from each region (Southeast-I, Southcentral-II, Interior-III), and headquarters. Additionally, the “Co-chairs” for the team have been identified as Allen Bingham and Bob Clark, of RTS. The team membership is as follows:

- Research and Technical Services **Allen Bingham and Bob Clark**—Co-chairs
- Headquarters: **Bill Romberg**
- Southeast-I: **Randy Ericksen**
- Southcentral-II: **Bob Lafferty and Matt Miller**
- Interior-III: **Charlie Swanton** and Tim Viavant (serves as back-up to Charlie)

As noted above, **Kathrin Sundet** and **Kirk Brogdon** will serve as technical representatives to the team, and as such will be actively involved in team activities.

## VI. RESOURCES & CONSTRAINTS

Several people will provide professional support and assistance to the SWHS-RT as it develops the identified end-product(s) and as such will be actively involved in team activities. These include:

- Teri Arnold, Division of Sport Fish (DSF) planner will coordinate the process and serve as technical advisors to the SWHS-RT on planning issues and facilitate the meetings;
- Janet Hall Schempf, DSF-Region V wildlife biologist has agreed to serve as meeting recorder;
- Kathrin Sundet, DSF-RTS SWHS project staff will serve as the technical representative of the SWHS project;
- Kirk Brogdon, DSF-RTS Information Technology Supervisor will serve as the technical representative from RTS in regards to technical systems support issues; and
- Other SWHS project staff as necessary may be called-in to provide technical support (e.g., answer questions) on an as-needed basis.

Phase One and Phase Two are currently planned to occur over the next year (October 2004–August 2005). During this time period the team members will meet in person (in Anchorage) 3 times during October 2004 to February 2005 and 3-4 times during March–August 2005 (one day meetings). The timeline for Phase Three has yet to be identified. Additional time commitments by team members will minimally include canvassing their region's managers and researchers regarding the information needs (as stated in Phase One-Step 1 above).

It is expected that on-going communication with the DLT, and feedback from the DLT will occur via Bob Clark who is project supervisor of the SWHS and a member of the SWHS-RT and DLT.

## VII. EVALUATION

The SWHS-RT will be evaluated by the SWHS-WG during February 2005 to determine if:

1. the SWHS-RT has made progress in meeting its objectives; and
2. if modifications to improve the effectiveness of the SWHS-RT are necessary.

At that time, adjustments to membership and timelines may be necessary.

SWHS-RT members agree to the provisions of this charter.

**APPENDIX B**  
**KICK-OFF MEMO FROM THE DIRECTOR**

**Appendix B1.**—Kick-off memo for the SWHS-RT from Director Kelly Hepler.

# MEMORANDUM

## State Of Alaska Department of Fish and Game

TO: All Sport Fish Division Staff

THRU:

FROM: Kelly Hepler, Director  
Division of Sport Fish  
HQ/Juneau

DATE: September 9, 2004  
FILE NO: Hepler-kickoffmemo-9-9-04.doc  
TELEPHONE NO: 465-6184  
SUBJECT: SWHS Review Process

As many of you know, the Statewide Harvest Survey (SWHS) is one of the most important tools Sport Fish Division uses to properly manage fisheries throughout Alaska. During the past 27 years, the SWHS has provided reliable estimates of sport fishing harvests, catches, and effort at a reasonable cost. As a result, many management programs have come to rely on estimates from the SWHS to assess fishing pressure, develop population data bases, and prescribe regulatory management actions and plans. In addition to this information, the SWHS has been increasingly called upon to provide additional fishery-specific information such as harvest and effort by time period, by river section, or by port of landing; and, to provide information specific to individual anglers such as analyses of annual bag limits. Although these types of information have been obtained from the SWHS, the survey was never meant to provide these types of specific information. As sport fisheries have changed in the last 27 years, so have the needs of fishery managers. Thus, our tools to manage fisheries may also need to change.

I am committed to meeting the needs of our managers into the future and need your help to do so. As part of the division's overall strategic planning effort, I have asked SWHS program staff and the Statewide Planning shop to work with a team of management staff from the regions and headquarters to:

7. identify and prioritize the various information needs that Sport Fish managers (and indirectly other management entities, e.g., the Board of Fisheries) have that can be addressed by a survey (or surveys) of the sport-fishing public;
8. review the existing SWHS to determine its effectiveness in meeting the identified/prioritized list of information needs from step 1; and,
9. report to the Division Leadership Team and make recommendations for redesigning the SWHS, if necessary to address the identified/prioritized list of information needs.

The team I have tasked with reviewing the SWHS is comprised of representatives from RTS, headquarters, and each of the management regions. They are: Allen Bingham and Bob Clark from RTS and Region V (acting as co-chairs of the review), Bill Romberg from Headquarters, Randy Ericksen from Region I, Bob Lafferty and Matt Miller from Region II, and Charlie Swanton from Region III. As reviewers, it will be their job to solicit the needs, ideas, and concerns that each of you have about the SWHS and apply this information to the review process. The review will begin with a team meeting on October 12 of 2004 and end in spring of 2005 with the team making recommendations to the Division Leadership Team. Teri Arnold, who is on staff of the Statewide Planning shop, is assisting the team with meeting facilitation and overall planning support.

It is very important that we get as much input from Sport Fish staff as possible into the review process. I ask that each of you contact your representative to this review and provide them with your needs, ideas, and concerns prior to the start of the review process in October. Thanks for your help on this very important review.

**APPENDIX C**  
**REVIEW TEAM MEETING AGENDAS**

**Appendix C1.**–Agenda for SWHS-RT meeting #1 on October 12, 2004.

**AGENDA**  
**Statewide Harvest Summary (SWHS) Review Team Meeting**

October 12, 2004 8:00 – 4:30 PM  
 Hilton Homewood Suites, Anchorage

<p><b>MEETING OBJECTIVES:</b></p> <ul style="list-style-type: none"> <li>• Meet and form as a team</li> <li>• Understand and accept Charter for SWHS Review Team</li> <li>• Build a shared framework of understanding:                         <ul style="list-style-type: none"> <li>➤ Identify Strengths, Weaknesses, Opportunities, Threats (SWOT) associated with SWHS</li> <li>➤ Identify and understand current and potential future needs that could be addressed by a survey of the sport-fishing public</li> </ul> </li> </ul>
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<p><b>Support Roles:</b></p> <p><i>Co-Chairs:</i> Allen Bingham, Bob Clark  <i>Facilitator:</i> Teri Arnold  <i>Recorder :</i> Janet Hall Schempf  <i>Tech support:</i> Kathrin Sundet and Kirk Brogdon</p>	<p><b>SWHS Review Team Members:</b></p> <p>Allen Bingham and Bob Clark, RTS &amp; Reg V              Bill Romberg, HQ              Randy Ericksen (and Tom Brookover) Region I              Bob Lafferty and Matt Miller, Reg II              Charlie Swanton (and Tim Viavant) Reg III</p>
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Time	Activity
8:00	Gathering and coffee
8:30	Welcome and Support Staff Intros & Roles
8:40	Agenda Review and Ground Rules
9:00	Team Intros
9:30	Background
9:50	SWOT exercise
10:20	Break
10:30	Continue SWOT exercise
11:00	Identification of Needs assessment
11:30	Lunch
12:30	Continue with needs identification and discussion.
2:15	Break
3:30	Wrap-up: <ul style="list-style-type: none"> <li>➤ Where we go from here/Assignments</li> <li>➤ Next meeting (Dec 7, Rifle Range)</li> </ul>
4:20	Meeting evaluation
4:30	Adjourn

**Appendix C2.**—Agenda for SWHS-RT meeting #2 on December 7, 2004.

**AGENDA**  
**Statewide Harvest Survey (SWHS) Review Team Meeting**

December 7, 2004 8:00 – 4:30 PM  
 Hilton Homewood Suites, Anchorage

**MEETING OBJECTIVES:**

- Review the assessment of the current SWHS with respect to the Needs List developed by the Review Team.
- Reach agreement on criteria to be used when evaluating the Needs List in regards to developing recommendations for the future of the SWHS Program.
- Reach agreement on the Purpose of the SWHS Program.

<p><b>Support Roles:</b></p> <p><i>Co-Chairs:</i> Allen Bingham, Bob Clark  <i>Facilitator:</i> Mark Burch  <i>Recorder :</i> Janet Hall Schempf  <i>Tech support:</i> Kathrin Sundet, Kirk Brogdon, and Gretchen Jennings</p>	<p><b>SWHS Review Team Members:</b></p> <p>Allen Bingham and Bob Clark, RTS &amp; Reg V              Bill Romberg, HQ              Randy Ericksen, Region I              Bob Lafferty and Matt Miller, Reg II              Charlie Swanton (and/or Tim Viavant) Reg III</p>
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Time	Activity
8:00	Gathering and coffee
8:15	Welcome and introductions & roles of new people
8:20	Agenda Review
8:25	Acceptance of last meeting summary
8:35	Team Document Repository Review ( <i>DocuShare</i> )
8:45	Presentation of Needs List assessment to existing SWHS
10:20	Break
10:30	Continue Needs List assessment to existing SWHS
11:30	Lunch
12:30	Criteria Development
3:00	Break ( <i>Adjust timing of break as necessary</i> )
3:15	Purpose of the SWHS Program
4:00	Wrap-up: <ul style="list-style-type: none"> <li>➤ Where we go from here</li> <li>➤ Assignments</li> <li>➤ Next meeting: February 1, 2005 8-4:30 at this hotel – Hilton Homewood Suites</li> </ul>
4:20	Meeting evaluation
4:30	Adjourn

**Appendix C4.**–Agenda for SWHS-RT meeting #4 on June 7, 2005.

**AGENDA**  
**Statewide Harvest Survey (SWHS) Review Team Meeting**

June 7, 2005 8:00 AM – 4:30 PM  
 Hilton Homewood Suites, Anchorage

**MEETING OBJECTIVES:**

- Review and approve grouping of the SWHS Review Team Needs Assessment List into the Implementation Categories
- Review and agree on Purpose Statement for SWHS Program.
- Develop recommendations to be submitted to the Division Leadership Team (DLT)

**Support Roles:**

*Co-Chairs:* Allen Bingham, Bob Clark  
*Facilitator:* Mark Burch  
*Recorder :* Janet Hall Schempf  
*Tech support:* Kathrin Sundet, Kirk Brogdon,  
 and Gretchen Jennings

**SWHS Review Team Members:**

Allen Bingham and Bob Clark, RTS & Reg V  
 Bill Romberg, HQ  
 Randy Ericksen, Region I  
 Bob Lafferty and Matt Miller, Reg II  
 Charlie Swanton (and/or Tim Viavant) Reg III

**Other support staff:** Tammy Wettin, Kurt Kamletz

Time	Activity
8:00	Gathering and coffee
8:15	Welcome
8:20	Agenda Review
8:25	Last meeting summary
8:35	Review Needs weighted by Criteria
8:45	Review and approve grouping of the SWHS Review Team Needs Assessment List into the Implementation Categories
10:00	<b>Break</b>
10:20	<i>Continue</i> - Review and approve grouping of the SWHS Review Team Needs Assessment List into the Implementation Categories
11:30	<b>Lunch</b>
12:30	Purpose Statement for SWHS Program
2:30	Develop Recommendations for DLT
	<b>Break as needed</b>
3:45	Wrap-up <ul style="list-style-type: none"> <li>➤ Where do we go from here</li> <li>➤ Assignments</li> <li>➤ Tentative Scheduling of Next Meeting (if necessary)</li> </ul>
4:20	Meeting evaluation – All
4:30	<b>Adjourn</b>



**Appendix C4.**–Agenda for SWHS-RT meeting #4 on June 7, 2005.

**AGENDA**  
**Statewide Harvest Survey (SWHS) Review Team Meeting**

June 7, 2005 8:00 AM – 4:30 PM  
 Hilton Homewood Suites, Anchorage

<p><b>MEETING OBJECTIVES:</b></p> <ul style="list-style-type: none"> <li>➤ Review and approve grouping of the SWHS Review Team Needs Assessment List into the Implementation Categories</li> <li>➤ Review and agree on Purpose Statement for SWHS Program.</li> <li>➤ Develop recommendations to be submitted to the Division Leadership Team (DLT)</li> </ul>
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<p><b>Support Roles:</b></p> <p><i>Co-Chairs:</i> Allen Bingham, Bob Clark  <i>Facilitator:</i> Mark Burch  <i>Recorder :</i> Janet Hall Schempf  <i>Tech support:</i> Kathrin Sundet, Kirk Brogdon,                  and Gretchen Jennings</p>	<p><b>SWHS Review Team Members:</b></p> <p>Allen Bingham and Bob Clark, RTS &amp; Reg V                  Bill Romberg, HQ                  Randy Ericksen, Region I                  Bob Lafferty and Matt Miller, Reg II                  Charlie Swanton (and/or Tim Viavant) Reg III</p>
<p><b>Other support staff:</b> Tammy Wettin, Kurt Kamletz</p>	

Time	Activity
8:00	Gathering and coffee
8:15	Welcome
8:20	Agenda Review
8:25	Last meeting summary
8:35	Review Needs weighted by Criteria
8:45	Review and approve grouping of the SWHS Review Team Needs Assessment List into the Implementation Categories
10:00	<b>Break</b>
10:20	<i>Continue</i> - Review and approve grouping of the SWHS Review Team Needs Assessment List into the Implementation Categories
11:30	<b>Lunch</b>
12:30	Purpose Statement for SWHS Program
2:30	Develop Recommendations for DLT
	<b>Break as needed</b>
3:45	Wrap-up <ul style="list-style-type: none"> <li>➤ Where do we go from here</li> <li>➤ Assignments</li> <li>➤ Tentative Scheduling of Next Meeting (if necessary)</li> </ul>
4:20	Meeting evaluation – All
4:30	<b>Adjourn</b>



**APPENDIX D**  
**FEDERAL AID IN SPORT FISH RESTORATION SYNOPSIS**

**Appendix D1.**—Federal Aid in Sport Fish Restoration synopsis for the SWHS program in fiscal year 2006 (July 2005 through June 2006).

## **FY 2006 OPERATIONAL PLAN SYNOPSIS**

Project Title: Statewide Harvest Survey  
Principal Investigators: Gretchen Jennings,  
*Program Coordinator*

Date Submitted: May 2005

Project: F-10-21  
Study: RT  
Job: 1

# **STATEWIDE HARVEST SURVEY**

## **NEED**

Meeting public demand for recreational fishing opportunities in Alaska while at the same time maintaining and protecting fishery resources has become increasingly complex. Decision-makers require information on participation, catch, and harvest in order to maintain, protect, and improve recreational fisheries. Because of Alaska's vastness obtaining this information through onsite creel surveys would be prohibitively expensive. This project will provide the needed information in the most cost-effective way.

## **BENEFITS**

This project will update and maintain a statewide database detailing where fishing occurs, the extent of participation, the preferences of participants, and the species and numbers of game fishes caught and harvested. Such information is essential for regulation and management of fisheries, for project evaluation, and for formulation of department policies and priorities that reflect angler needs, concerns, and preferences.

This project not only meets management needs, but also provides information necessary for establishing priorities; for formulating policies; for planning and evaluating rehabilitation, enhancement hatchery, stocking, habitat protection, and access acquisition projects; for stock assessment; for forecasting; for gauging the economic and social significance of sport fishing; and for satisfying requests for information from individuals, special interest groups, government agencies, and the recreational industry.

## **OBJECTIVE**

1. To estimate participation, catch, and harvest for major Alaska sport-caught species statewide, by area, and by fishery such that statewide estimates of participation and harvest will be within 15% of actual values 95% of the time.

## **PROCEDURES**

Questionnaires will be developed and mailed to a stratified random sample of households with 2005 Alaska sport fishing license(s). Reminder letters and questionnaires will be mailed to first-time and second-time nonrespondents. Data from returned questionnaires will be coded, keypunched, verified, edited, and processed; producing summary reports. A computer-based processing, storage, and retrieval system will be maintained and updated.

## **LOCATION**

The project will be conducted out of the Anchorage office, but will collect information from resident and nonresident anglers on fishing throughout Alaska.

## **BUDGET SUMMARY**

<b>Code</b>	<b>Line Item</b>	<b>Cost (\$K)</b>
100	Personal Service	\$388.3
200	Travel	\$1.0
300	Contractual	\$274.5
400	Commodities	\$6.0
500	Equipment	\$0
700	Grants	\$0
<b>Total</b>		<b>\$669.8</b>

Budget Manager: Gretchen Jennings, Program Coordinator