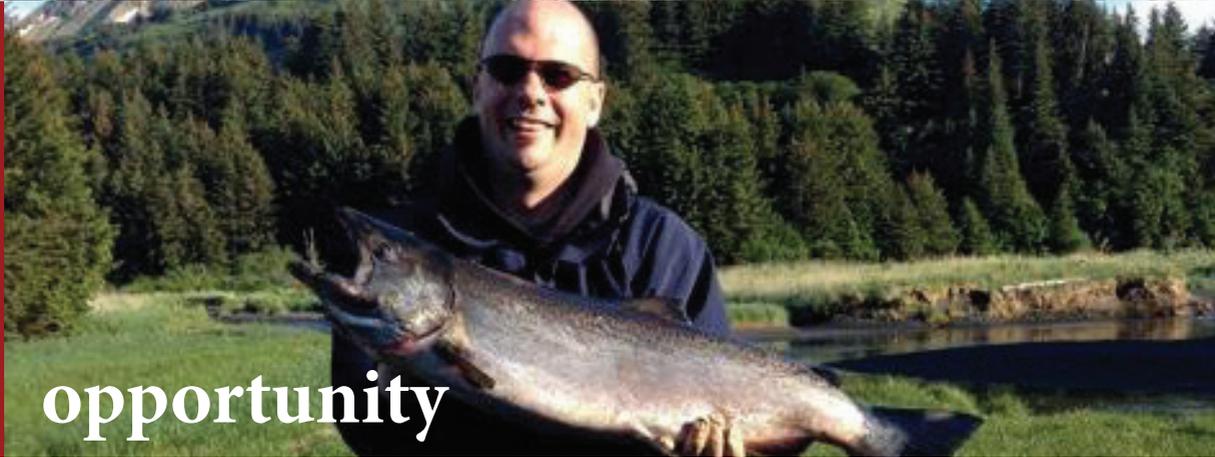




security



sustainability



opportunity



**2013 ANNUAL REPORT**



**COVER CREDITS**

Top to Bottom:  
Toby Sullivan  
Jodi Estrada  
Heather Sadusky

A scenic view of a rocky coastline. The foreground is dominated by dark, jagged rocks and vibrant green grass. Several tall, purple lupine flowers are in bloom, some with yellow centers. The middle ground shows a calm, blue body of water reflecting the sky. In the background, the ocean extends to the horizon under a clear, bright sky. The overall atmosphere is serene and natural.

The Kodiak Regional Aquaculture Association is DEDICATED to salmon fisheries development in the Area K Management Area for the BENEFIT of all common property users — SUBSISTENCE, SPORT, and COMMERCIAL — through RESEARCH and management efforts, habitat monitoring and PROTECTION, stocking, enhancement and REHABILITATION projects. KRAA further promotes RESPECT for Kodiak Area salmon RESOURCES through science education and partnership programs.



## Executive Director's Letter

**Tina Fairbanks**

**S**ecurity.  
Sustainability.  
Opportunity.

These three concepts are intertwined through all facets of our lives, and they are the backbone of our mission at KRAA. This year I will add two more: Growth and Change.

The Kodiak Comprehensive Salmon Plan, updated in 2010, charges KRAA with the goal of expanding enhanced production and supporting natural systems to provide opportunity to salmon permit holders, subsistence fishermen and sport fishermen alike. To that end, KRAA has implemented projects at Kitoi Bay Hatchery to expand and update facilities and provide the ability to produce fish at its maximum permitted level—a feat that was achieved for the first time in

2013. Likewise, changes to the projects and strategy at Pillar Creek Hatchery have added new release sites for sockeye salmon and infrastructure at the hatchery to support it. KRAA's efforts to support the sockeye runs at Karluk and Upper Station are ongoing, and those, too, are directed at providing security, sustainability and opportunity for all user groups.

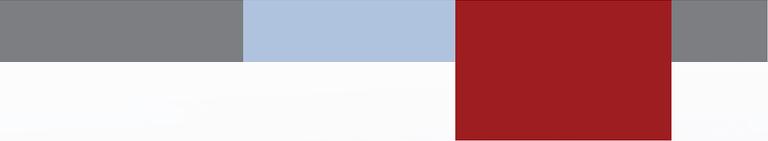
I have been fortunate to enjoy a number of positions within the organization. Many of those positions have been tied to the growth of the Association that you have witnessed in recent years. With the growth in personnel, KRAA has built its own capacity and ability to conduct projects and investigations for the benefit of all user groups. The projects and research KRAA conducts

are focused on the support of existing hatchery production and long term research and also look to pave the way for future production as well as security, sustainability and opportunity for Kodiak's fisheries and user groups.

KRAA's projects, both new and old, contribute to our local economy, sustain our fisheries and our way of life, generate opportunity for all user groups, and seek to bolster fisheries that are struggling. KRAA's staff is committed to seeing our contribution continue to grow. We are looking toward the future and pursuing the goals set out by our mission to enhance local fisheries in a manner that best represents your interests and the interests of your fisheries. The door is always open at KRAA, and I invite your visits and your questions.

A scenic sunset over a lake. The sun is low on the horizon, casting a golden glow across the sky and reflecting on the water. A seaplane is on the water in the middle ground, and a small boat is in the foreground. The background shows a forested shoreline. The text is overlaid on the upper left portion of the image.

**“** The projects and research KRAA conducts are focused on the support of existing hatchery production and and long-term research and look to pave the way for future production as well as **SECURITY, SUSTAINABILITY and OPPORTUNITY** for Kodiak’s fisheries and user groups. **”**



## Aquaculture in Kodiak

**R**egional aquaculture associations were originally formed in 1976 through legislative action prompted by Alaskan fishermen who lobbied for the exclusion of private enterprise from salmon fisheries development and enhancement (and the creation of the nonprofit hatchery associations—both the regional aquaculture association

for each area, as well as other private non-profit or PNP organizations). The ultimate goal was to give Alaskans a voice in salmon fishery enhancement decisions and a hand in actions, such as rehabilitation of weak salmon stocks or supplemental salmon production, research and educational outreach, and habitat protection and improvement.

Each association is governed by a board of directors comprised of area permit holders representing each gear group as well as processing, marketing, sport fishing and other interests. The Kodiak Regional Aquaculture Association (KRAA) was officially approved by the commissioner of the Alaska Department of Fish and Game in 1983, and it

has been enhancing and rehabilitating salmon runs in the Kodiak area for over 30 years.

During its formative first decade, KRAA achieved much through lake enrichment projects, and, by 1994, supplemental sockeye production from stocking barren lakes reached significant levels. Since then, KRAA's contribution to the Kodiak Area salmon harvest has continued to expand.

Currently, the Association is primarily funded through two avenues: cost-recovery fishery licensing revenues and a two percent salmon enhancement tax (SET) on first point-of-sale commercial salmon fisheries harvest revenues. The SET is initially paid to the State of Alaska by Area K salmon permit holders. The tax is calculated from gross revenue at the time of delivery and is held in the State of Alaska General Fund until the time of disbursement each year. The monies distributed to each Regional Aquaculture Association are based on landings in that region, and

SET revenues generated in Area K are disbursed annually to KRAA by the state Department of Commerce, Community, and Economic Development.

### **REGIONAL PLANNING TEAM**

The Kodiak Regional Planning Team (KRPT) is comprised of six voting members: three positions are held by representatives of KRAA, and representatives of ADF&G hold three seats. The team currently has a non-voting chairman and several non-voting ex-officio members. According to Alaska regulations, 5AAC 40.340, "each regional planning team shall prepare a regional comprehensive salmon plan, for the appropriate region to rehabilitate natural stocks and supplement natural production with provisions for both public and private nonprofit hatcheries."

### **RPT MEMBERS**

**Tina Fairbanks, Chair (KRAA - Staff)**  
**Steve Schrof (ADF&G - 2014 Chair)**  
**Oliver Holm (KRAA - President)**  
**Wallace Fields (KRAA - Vice President)**  
**Rick Ellingson (KRAA - Board Member)**  
**Ron Josephson (ADF&G - FMPD)**  
**Jeff Wadle (ADF&G -KMA)**  
**Donn Tracy (ADF&G - SF)**

*"Providing Food Security, Cultural Sustainability and Economic Opportunity."*

## Pillar Creek Hatchery

**P**illar Creek Hatchery (PCH) was constructed in 1990 as a cooperative project between Alaska Department of Fish and Game and KRAA. Though the facility is owned by the State of Alaska, KRAA operates the hatchery under an agreement with the State.

The hatchery was originally designed to produce juvenile sockeye salmon for barren lake systems, and to stock anadromous lakes to rehabilitate weak sockeye salmon stocks. These stocking projects were developed to improve sockeye salmon harvest opportunities in the Kodiak Management Area.

Today, PCH continues to produce juvenile sockeye salmon for lake stocking and net pen projects and works cooperatively with ADF&G Division of Sport Fish to produce coho and king salmon, and rainbow trout to enhance fishing opportunities on the Kodiak Road System.

In 2013, the hatchery underwent several capital improvements. The largest of which was the construction of a roof structure over the sockeye salmon raceways. The new roof not only protected hatchery infrastructure and provided the hatchery crew with a safe and dry environment to work, but also kept snow and ice from building

up in the raceways. Ice-free raceways meant that when the winter dormancy period was over, fish feeding could start right away.

Next on the capital improvement list is a new multi-use building with a shop, seasonal quarters, dry storage, and office.

### 2013 Releases

LOCATION	SPECIES	STOCK	STAGE	NUMBER
Hidden Lk	Sockeye	Afognak Lk	Fed Fry	274,886
Crescent Lk	Sockeye	Afognak Lk	Fed Fry	187,365
Spiridon Lk	Sockeye	Saltery Lk	Fed Fry	2,101,690
Telrod Cove	Sockeye	Saltery Lk	Smolt	648,354
Anton Larsen Bay	Sockeye	Little Kitoi Lk	Smolt	491,749
Ouzinkie Village	Sockeye	Little Kitoi Lk	Smolt	95,031
Island Lk	Coho	Buskin Lk	Fingerling	23,850
Dark Lk	Coho	Buskin Lk	Fingerling	8,850
Mission Lk	Coho	Buskin Lk	Fingerling	13,400
Potato Patch Lk	Coho	Buskin Lk	Fingerling	10,400
Mayflower Lk	Coho	Buskin Lk	Fingerling	6,500
Abercrombie Lk	Coho	Buskin Lk	Fingerling	3,500
Barry Lagoon	Coho	Buskin Lk	Fingerling	22,500
Lilly Lk	Coho	Buskin Lk	Fingerling	10,900
Pillar Creek	Coho	Buskin Lk	Smolt	28,070
Monashka Ck	Coho	Buskin Lk	Smolt	28,020
Katmai Lk	Coho	Big Kitoi Ck	Pre-smolt	33,435
Monashka Ck	Chinook	Monashka Ck	Smolt	51,207
American River	Chinook	Monashka Ck	Smolt	50,072
Olds River	Chinook	Monashka Ck	Smolt	40,000
Kodiak Road System Lakes	Rainbow Trout	Ft. Richardson Cap. Spawn	Fingerling	29,337



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Photo by : Trent Dodson



## Kitoy Bay Hatchery

**K**itoy Bay Hatchery (KBH) is located on Afognak Island, approximately 25 miles northwest of the City of Kodiak. KBH was constructed in 1954 by the United States Department of the Interior, Fish and Wildlife Service, but was destroyed in the 1964 earthquake and rebuilt by the Alaska Department of Fish and Game in 1965. KBH is owned by the State of Alaska; however, KRAA operates the facility under an agreement with the State of Alaska.

The hatchery was initially designed as a sockeye salmon research facility, but by 1976, the hatchery production priorities switched to pink salmon enhancement. The present goal of the facility is to provide enhanced salmon fishing opportunities for the Kodiak Management Area by increasing the returns of pink, chum, coho, and sockeye salmon, to the Kitoy Bay area.

In previous years, KBH was operating at its permitted capacity for chum salmon of 28 million green eggs. In 2013 the KRPT and the State of Alaska approved a Permit Alteration Request

to increase chum salmon capacity to 36 million green eggs. This increase was made possible through grants from the Alaska Legislature for deferred maintenance and upgrades to these state-owned facilities. The funds have allowed KRAA to conduct much needed maintenance and to upgrade the aging facility to modern standards of operation. In so doing, Kitoy Bay Hatchery has also been able to achieve efficiency in incubation infrastructure which has created additional incubation capacity for chum salmon and allowed for expanded production to KBH's permitted capacity of 215 million pink salmon eggs.

There were many capital improvements and construction projects at KBH in 2013. Some of the major projects included the construction of a new building to incubate and rear sockeye salmon for the Little Kitoy Lake project. The new facility can incubate up to 850,000 sockeye salmon eggs and rear the resultant presmolt and smolt. Along with the sockeye building, the pink salmon building was doubled in sized with a new addition. The old structure will be torn down and replaced in 2014.

### 2013 Releases

LOCATION	SPECIES	STOCK	STAGE	NUMBER
Big Kitoy Bay	Chum	Big Kitoy Ck	Fed Fry	16,772,259
Big Kitoy Bay	Pink	Big Kitoy Ck	Fed Fry	107,009,684
Little Kitoy Lk	Sockeye	Saltery Lk	Pre-smolt	21,661
Little Kitoy Lk	Sockeye	Saltery Lk	Smolt	412,472
Ruth Lk	Coho	Big Kitoy Ck	Fed Fry	30,000
Lower Jennifer Lk	Coho	Big Kitoy Ck	Fed Fry	59,232
Upper Jennifer Lk	Coho	Big Kitoy Ck	Fed Fry	104,768
Crescent Lk	Coho	Big Kitoy Ck	Fed Fry	165,000
Big Kitoy Bay	Coho	Big Kitoy Ck	Smolt	1,036,682

## Egg Collections

The two hatchery facilities operated by KRAA were designed for very different applications. Kitoi Bay Hatchery releases the bulk of its production directly into Kitoi Bay while Pillar Creek Hatchery was designed primarily as a central incubation facility with the intention that production would originate from places like Afognak and Saltery lakes and be stocked into barren lakes remote from the hatchery facility. The differing concepts behind the facilities create widely different strategies and practices in egg collection.

The bulk of adult returns to Kitoi Bay are intercepted in many of the districts of the KMA and largely in Duck, Izhut and Kitoi bays. However, the hatchery collects its

broodstock from those fish that make their way through the common property fisheries and return directly to the hatchery. Egg collection, or egg takes are collected at Kitoi Bay under fairly controlled circumstances. Eggs collected at KBH are placed directly into the incubation facility. By contrast, Pillar Creek Hatchery releases its production to remote locations like Spiridon, Waterfall, and Crescent lakes and therefore, crews from PCH must travel to locations such as Afognak and Saltery lakes in order to collect broodstock.

With returns coming directly to the hatchery and releases in close proximity, production from Kitoi Bay Hatchery can be relatively consistent on an annual basis—provid-

ed broodstock is available. On the other hand, sockeye salmon projects at PCH tend to have more variability. Many of the 2013 sockeye egg-take goals were based on the recommended 2014 juvenile release figures for each lake stocking project. Some of the recommended stocking figures are based on an in-season assessment of each lake's zooplankton population in July and August 2013. As zooplankton levels vary, so do stocking recommendations.

The required broodstock numbers for 2013 fell within the historic range, except where increases had been sought; and actual numbers of eggs collected by each facility and from each brood source are detailed in the table below.

LOCATION	SPECIES	STOCK	HATCHERY	NUMBER COLLECTED
Afognak Lake	Sockeye	Afognak Lake	Pillar Creek	476,843
Saltery Lake	Sockeye	Saltery Lake	Pillar Creek	4,561,233
Little Kitoi Lake	Sockeye	Saltery Lake	Kitoi Bay	824,339
Buskin Lake	Coho	Buskin Lake	Pillar Creek	123,500
Pillar Creek	Coho	Buskin Lake	Kitoi Bay	1,295,000
Big Kitoi Creek	Coho	Buskin/Little Kitoi	Kitoi Bay	580,639
Big Kitoi Creek	Chum	Sturgeon River	Kitoi Bay	27,929,205
Big Kitoi Creek	Pink	Big Kitoi Creek	Kitoi Bay	214,455,303
Monashka Creek	Chinook	Karluk Lake	Pillar Creek	365,019

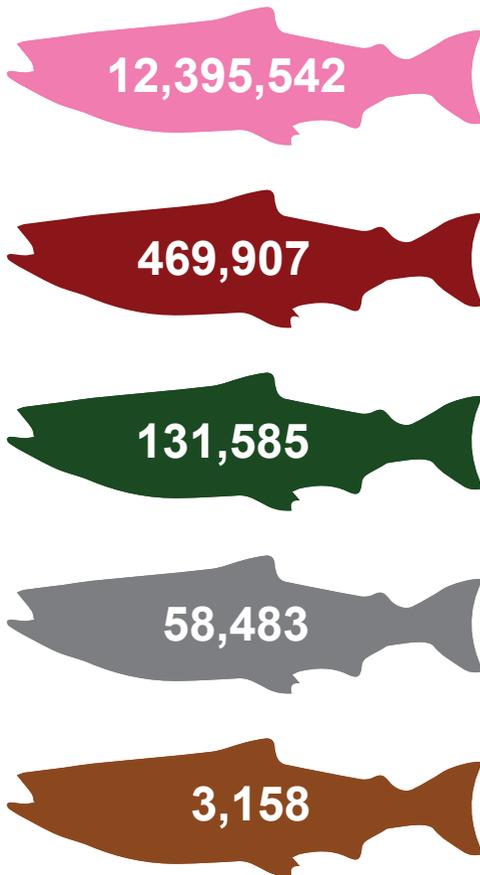


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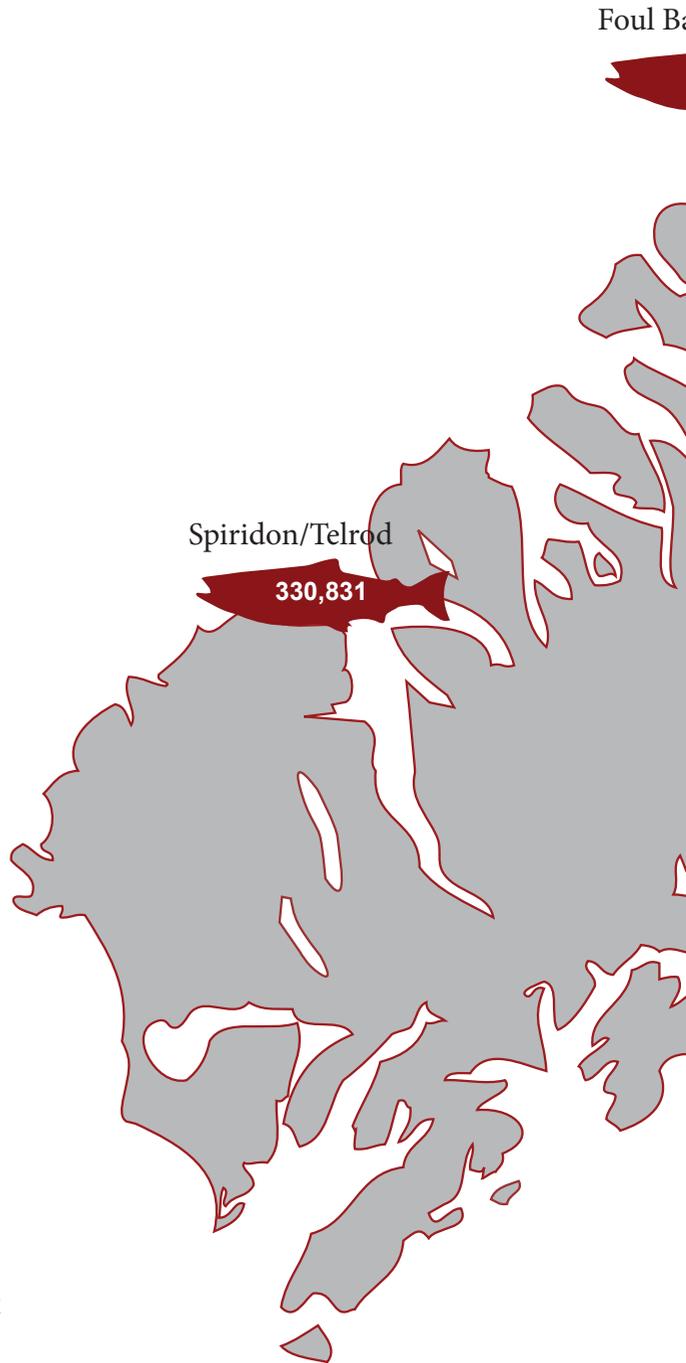


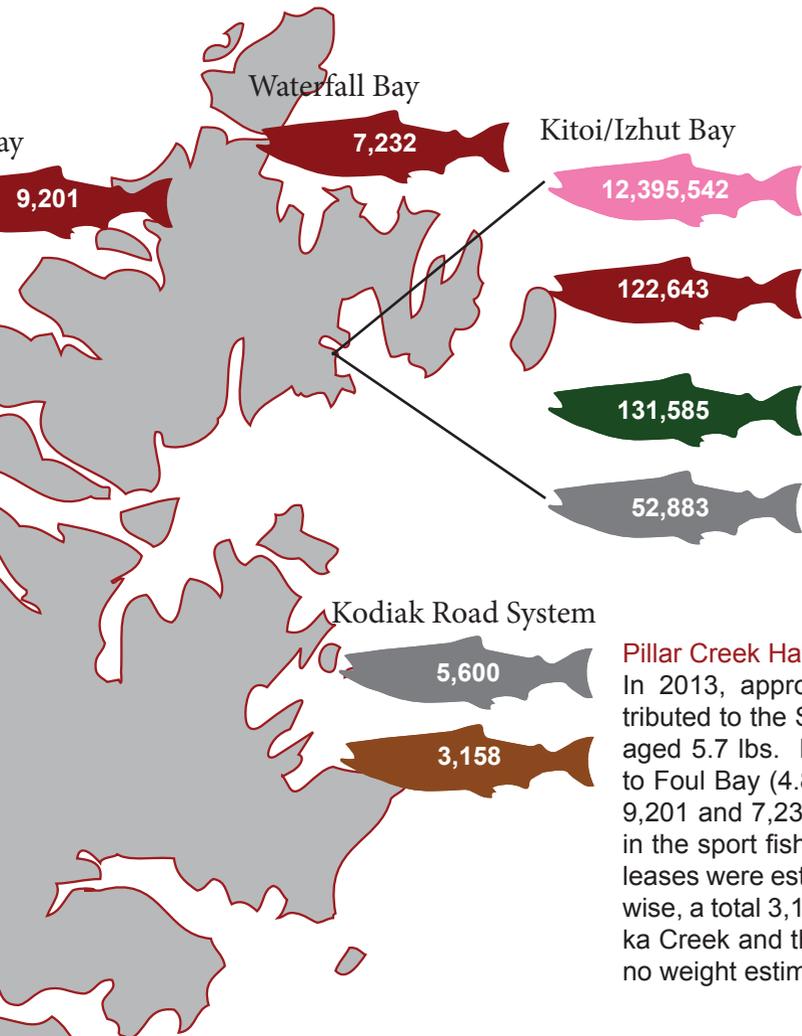
## 2013 Contribution

### 2013 KRAA Total Returns



Figures include all returning salmon attributed to all KRAA releases sites (except Crescent Lake)





### Kitoi Bay Hatchery Production

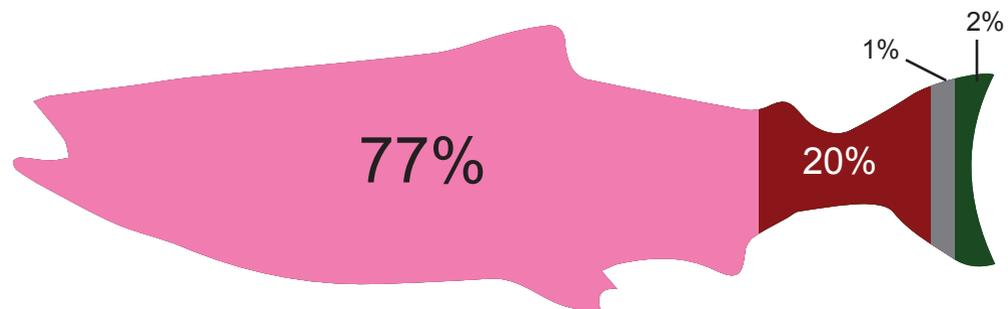
In 2013, Kitoi Bay produced returns of 131,585 chum salmon with an average weight of 5.7 lbs. Pink salmon returned to Kitoi Bay in near-record numbers, as approximately 12.4 million 3.1-pound pink salmon returned to Kitoi Bay (10.1 million were harvested by the common property). Around 122,000 sockeye salmon returned to Kitoi Bay from direct releases at Little Kitoi Lake. The sockeye averaged about 4.2 lbs. The 52,883 coho salmon returning to Kitoi Bay averaged about 6.8 lbs.

### Pillar Creek Hatchery Production

In 2013, approximately 330,831 sockeye salmon attributed to the Spiridon Lake project returned and averaged 5.7 lbs. Estimates for sockeye salmon returning to Foul Bay (4.8 lbs.) and Waterfall Bay (5.0 lbs.) were 9,201 and 7,232 respectively. Coho salmon harvested in the sport fishery returning to Kodiak road system releases were estimated to be approximately 5,600. Likewise, a total 3,158 Chinook salmon returned to Monashka Creek and the American and Olds rivers. There are no weight estimates for coho and Chinook salmon.

## 2013 Commercial Harvest and Value of KRAA Contribution

In 2013, KRAA-produced fish contributed a value of approximately \$16.247 million\* (26.2% of the total Kodiak commercial harvest value) to the Kodiak commercial harvest. The graphic below shows how that value was distributed among salmon species.



\*Includes cost recovery values; Source: Vercessi, L. 2014. Alaska salmon fisheries enhancement program 2013 annual report. Alaska Department of Fish and Game, Fishery Management Report 14-12, Anchorage.



## Cost Recovery

Cost recovery harvests are authorized by the State of Alaska to “recover” all or part of the costs of operating the hatchery, for improvements to the hatchery, for other salmon enhancement or rehabilitation projects in the region, fisheries research, or reasonable operating or administrative costs. Prior to the fishing season, the KRAA Board of Directors establishes cost recovery goals designed, in part, to reach funding objectives while minimizing impact on the common property fishery.

KRAA is authorized by the state to license the harvest of salmon for cost recovery in strategically designated locations called Special Harvest Areas (SHAs). These areas, often located in terminal or hatchery locations, allow harvest of salmon with minimal impact on common property openings. Once the hatchery’s broodstock and/or cost recovery goals are realized or within reach,

salmon fishing in the SHA and associated districts may be opened by again to the common property fishery by order of ADF&G area managers and Management Plans.

In 2013, the Association concentrated cost recovery efforts at the Kitoi Bay and Spiridon Bay Special Harvest Areas.

### SPIRIDON BAY SPECIAL HARVEST AREA - TELROD COVE

KRAA initiated a cost recovery program in 2010 to provide a regular funding stream for Pillar Creek Hatchery operations and salmon research and monitoring projects. The 2013 Telrod Cove cost recovery goal was set at 500,000 pounds of sockeye salmon returning from Spiridon Lake stocking projects.

In 2013, the Telrod Cove cost recovery harvest began on June 26, 2013 and concluded on July 19, 2013. A total

of 95,725 sockeye salmon, averaging approximately 5.3 lbs. were harvested during the cost recovery fishery, and an additional 33,299 sockeye salmon were harvested within the SHA during the common property fishery. The total return of Telrod Cove bound sockeye salmon was calculated at 330,831 adult fish and contributed more than 201,807 fish to fisheries in districts outside the SHA.

### KITOI BAY SPECIAL HARVEST AREA

The Kitoi Bay cost recovery goal for 2013 was set at 4 million pounds of Kitoi Bay Hatchery pink salmon. Efforts began on August 9, 2013 and concluded on August 24, 2013 when a total of 1,628,821 pink salmon had been harvested and the 4 million pound goal was realized. Over 10.1 million pink salmon were harvested in the common property fishery at Kitoi Bay.



Photo by Rachel Hamm

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Photo by : Rachel Hamm



## Research and Monitoring

To evaluate the success and effectiveness of the Association's programs, KRAA and ADF&G biologists implement projects centered on monitoring and evaluating juvenile salmon survival and/or adult salmon returns. Projects for 2013 included:

### SPIRIDON LAKE/TELROD COVE

Annual sockeye salmon smolt emigrations from Spiridon Lake are enumerated and sampled for age and size to assess growth, juvenile survival and smolt-to-adult survival. These efforts include operation and maintenance of a bypass system (diversion weir, traps, dewatering tanks, and pipeline) in May and June. In 2013, approximately 700,000 sockeye salmon smolt emigrating from Spiridon Lake were enumerated through the bypass system. Approximately, 65% of the migrating smolt were age 1 and 35% were age 2

Returning adult sockeye salmon are harvested in the commercial salmon fisheries within the Northwest Kodiak District with a large portion caught in the Spiridon Bay Special Harvest Area (SBSHA), located at Telrod Cove. From mid-June to early August, the fishery in the SBSHA is monitored by KRAA staff. Monitoring duties include estimating the build-up of returning

sockeye salmon, estimating and sampling the sockeye salmon harvest, and estimating the incidental harvest of Chinook, chum, pink, and coho salmon. Just under 130,000 sockeye salmon were harvested in Telrod Cove during the 2013 season.

### WATERFALL BAY

Sockeye salmon juveniles were stocked into Little Waterfall Lake from 1992-2009 and 2011, and intermittently into Big Waterfall Lake in 1992, 1994, and 1999-2010. In addition to stocking, Little Waterfall Lake was fertilized from 1993 through 2001 in order to maintain a stable forage base (zooplankton) for the rearing juvenile sockeye salmon. Due to low zooplankton levels, no fish were released at Little Waterfall and Big Waterfall lakes in 2013.

To quantify sockeye salmon returns to the Waterfall Bay Special Harvest Area, ADF&G and KRAA have been monitoring the annual commercial harvest since 1995. Commercial harvest monitoring duties include the installation and maintenance of a barrier net in the estuary of Little Waterfall Bay. The barrier net provides fishermen the opportunity to harvest all of the returning sockeye salmon to the WBSHA. The 2013 harvest at WBSHA yielded 7,232 sockeye salmon.

### HIDDEN LAKE/FOUL BAY

Sockeye salmon returning to Foul Bay are harvested in the Foul Bay Special Harvest Area (FBSHA). ADF&G annually monitors the commercial harvest and collects adult AWL samples. Lake limnology data is collected to evaluate the response of the lake's zooplankton community to predation by juvenile salmon. Additionally, freshwater growth and fry to adult survival data are collected and evaluated. A total of 9,201 sockeye salmon were harvested in Foul Bay.

### FRAZER LAKE

In 1962 a fish pass was constructed around the barrier waterfall on the Dog Salmon River, which allowed fish to access Frazer Lake and tributary spawning habitats. Throughout the years, many improvements have been made to the fish pass, and now both juvenile salmon and adults are passed and enumerated to provide bet-

ter forecasting and management strategies.

Today, ADF&G and KRAA work in collaboration to operate the Frazer fish pass and weir for the duration of the sockeye return. To estimate the abundance of smolt, an incline plane trap is installed in the upper reaches of the Dog Salmon River and fished May through early July. Throughout the emigration, age, weight and length data are collected daily.

In 2013, just over 136,000 sockeye salmon were passed through the fish pass and into the upper reaches of the Frazer Lake. The associated commercial fishery in the Alitak Bay District is sampled and harvests are apportioned. In 2013, an estimated 170,623 Frazer sockeye salmon were harvested in Alitak\* commercial fisheries.

### SALTERY RIVER

KRAA provides funding and personnel to ADF&G to install and operate the weir on an annual basis. Reliable and accurate counts are particularly important to KRAA operations due to the remote egg-takes that occur on the system. Every summer, Pillar Creek Hatchery collects eggs from Saltery Lake sockeye salmon to be reared for release at Spiridon Lake or one of KRAA's other late-run sockeye salmon projects.

In 2013, more than 36,000 sockeye salmon were passed through the Saltery River weir. Once escapement goals were met, KRAA utilized 2,286 adult sockeye salmon for broodstock. Salt-ery sockeye are targeted by subsistence, sport and commercial fishermen.

LOCATION	SOCKEYE HARVEST	AGE 1.2	AGE 1.3	AGE 2.2	AGE 2.3
Telrod <sup>1</sup>	129,024	70.8%	18.1%	5.4%	4.1%
Waterfall <sup>2</sup>	7,232	34.2%	52.6%	9.0%	4.0%
Foul Bay <sup>3</sup>	9,201	39.7%	55.3%	2.2%	2.4 %

<sup>1</sup>age classes 1.1, 2.1, 3.2, combined accounted for 1.6% of the total age composition

<sup>2</sup>age class 1.1 accounted for 0.5% of the total age composition

<sup>3</sup>age classes 1.1 and 2.1 combined accounted for less than 0.5% of the total age composition



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Photo by : Trent Dodson

## Limnology

**A**DF&G, with KRAA funding and equipment, operates a limnology laboratory in Kodiak for the collection, processing and analysis of water chemistry and zooplankton samples. Limnology data collection from Kodiak lakes began in the early 1980's. KRAA, in a cooperative agreement with the ADF&G, has provided the funding for the majority of limnology data collection and processing since 1991. In 2013 KRAA funded sampling at 17 lakes on Kodiak and Afognak Island.

Most lakes in the Kodiak area are accessible only by floatplane. Samples collected while working off the floats include zooplankton net hauls, water samples, temperature and dissolved oxygen profiles, and light incidence measurements. In the laboratory, zooplankton is measured and enumerated under the microscope, and water samples can be analyzed for pH, alkalinity, Chlorophyll a, and nutrient content.

ADF&G uses limnology data to assess lake productivity and changes in the freshwater rearing environment of sockeye salmon. From these analyses, ADF&G provides stocking recommendations to KRAA for sockeye salmon projects.

Limnology data collected on lakes that are not regularly stocked with salmon is archived to provide baseline information. These data are important in instances where sockeye returns begin to dwindle. The baseline limnology and zooplankton data can be used to attribute, or rule out, run failures caused by unfavorable juvenile rearing conditions.

Data collected at Karluk, Spiridon, and Frazer lakes are used to assess nutrient enrichment projects. To date, the Karluk enrichment project is in the final phase of the United States Fish and Wildlife Service's environmental assessment (EA). If the EA concludes that nutrient enrichment is a compatible project with the Kodiak National Wildlife Refuge, enrichment could begin as soon as 2015.

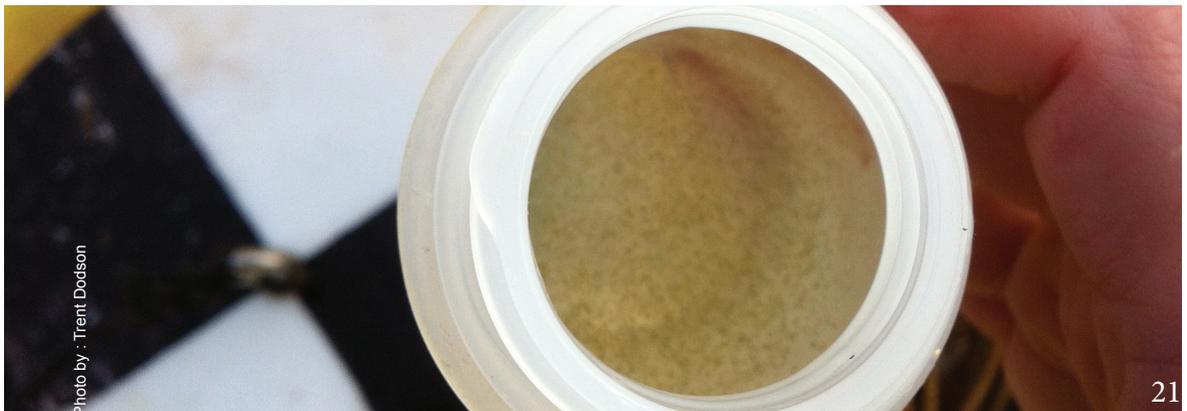


Photo by : Trent Dodson

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## Education and Outreach

**A**s a state-sanctioned regional aquaculture association, KRAA has the unique ability to provide resources for the communities of Kodiak. Along with producing salmon, KRAA provides dynamic educational opportunities, events, and resources that advance scientific knowledge and promote stewardship of Kodiak's salmon resource. KRAA's education and outreach efforts strive to foster two-way communication and actively involve the community in salmon enhancement decisions.

In 2013, KRAA provided support for the Kodiak High School Tsunami Bowl team and assisted team members with their project. KRAA staff also participated in Family Science night by teaching elementary students about the different salmon life stages. During the Kodiak Envirothon, the Research and Monitoring team taught high

school students how salmon life histories played a part in where salmon are found in a watershed. Staff also manned the aquatics section during the Envirothon activity day. Pillar Creek Hatchery provided a fish tank display during the 2013 Kodiak ComFish Trade Show, and hatchery staff participated in Family Science Night and provided countless hatchery tours to members of the public, visitors to Kodiak and classes from our public and private schools.

Now in its seventh year, KRAA's internship program is targeted toward students pursuing fisheries, aquaculture, biology, and natural resources degrees. Students participating in the program are provided a hands-on opportunity to work in a field camp and gather data. By working alongside experienced biologists and technicians, students are provided professional development

opportunities and acquire skills that often are not available in classroom settings.

In turn, by working with the students from universities outside of Alaska, the Association is able to introduce our enhancement programs and raise national awareness of Aquaculture in Alaska and its role in enhancing and providing sustainable salmon. Moreover, while employing interns provides a considerable cost savings, KRAA is able to develop relationships with potential employees.

Since its inception, the program has provided opportunities for numerous individuals, several of whom have returned to KRAA to work as technicians.

### 2013 KRAA INTERNS

**Timmy Songer  
Ethan Trim  
Kelly Krueger  
Heather Sadusky  
Elizabeth Fata**

“Working with KRAA showed me how SMART and SUSTAINABLE aquaculture can be; and more importantly, introduced me to the people who’s livelihoods depend on it.”

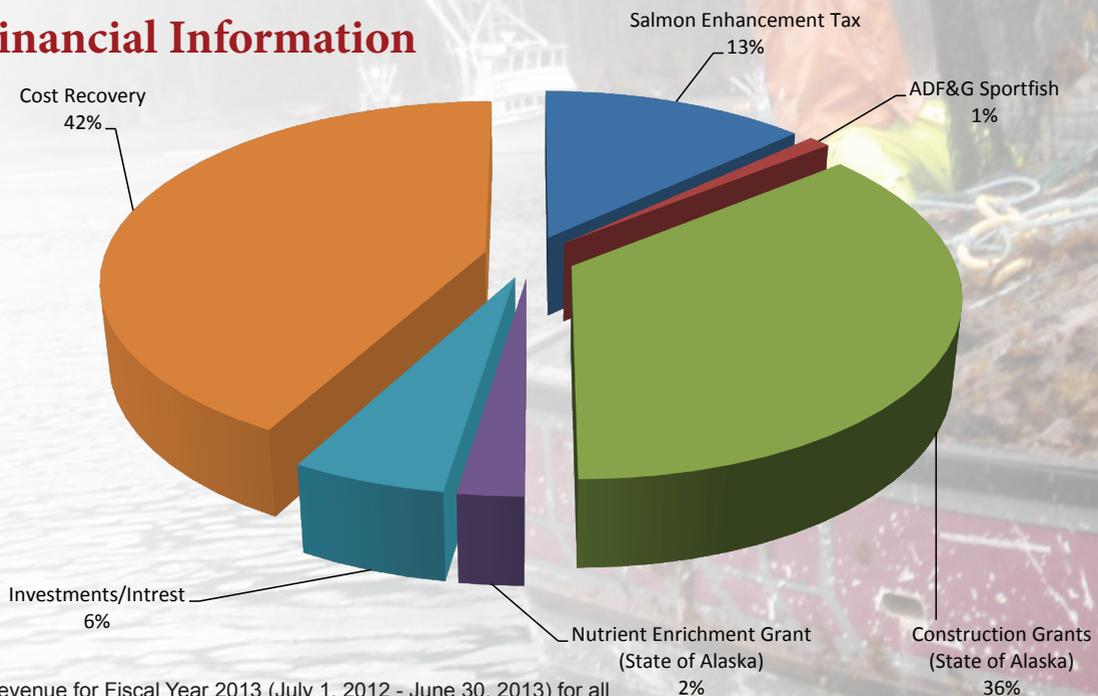
HEATHER SADUSKY



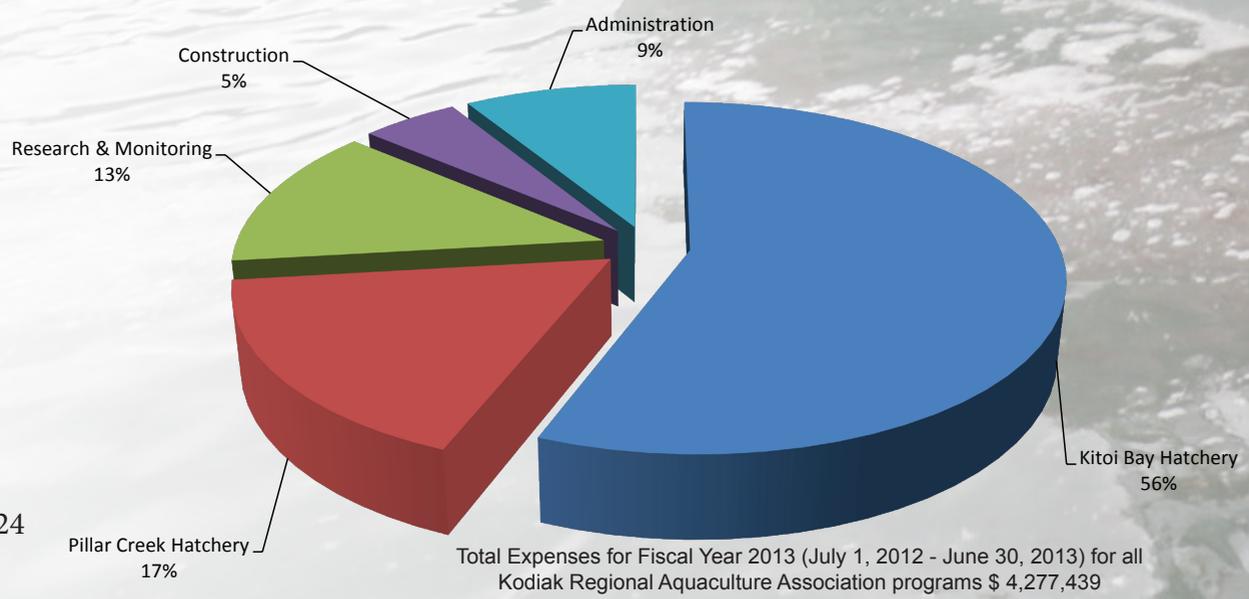
Photo by : Trent Dodds

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# Financial Information



Total Revenue for Fiscal Year 2013 (July 1, 2012 - June 30, 2013) for all Kodiak Regional Aquaculture Association programs \$ 7,345,083  
 \*Construction Grants (\$2,791,132) received in FY13 are expended in FY14

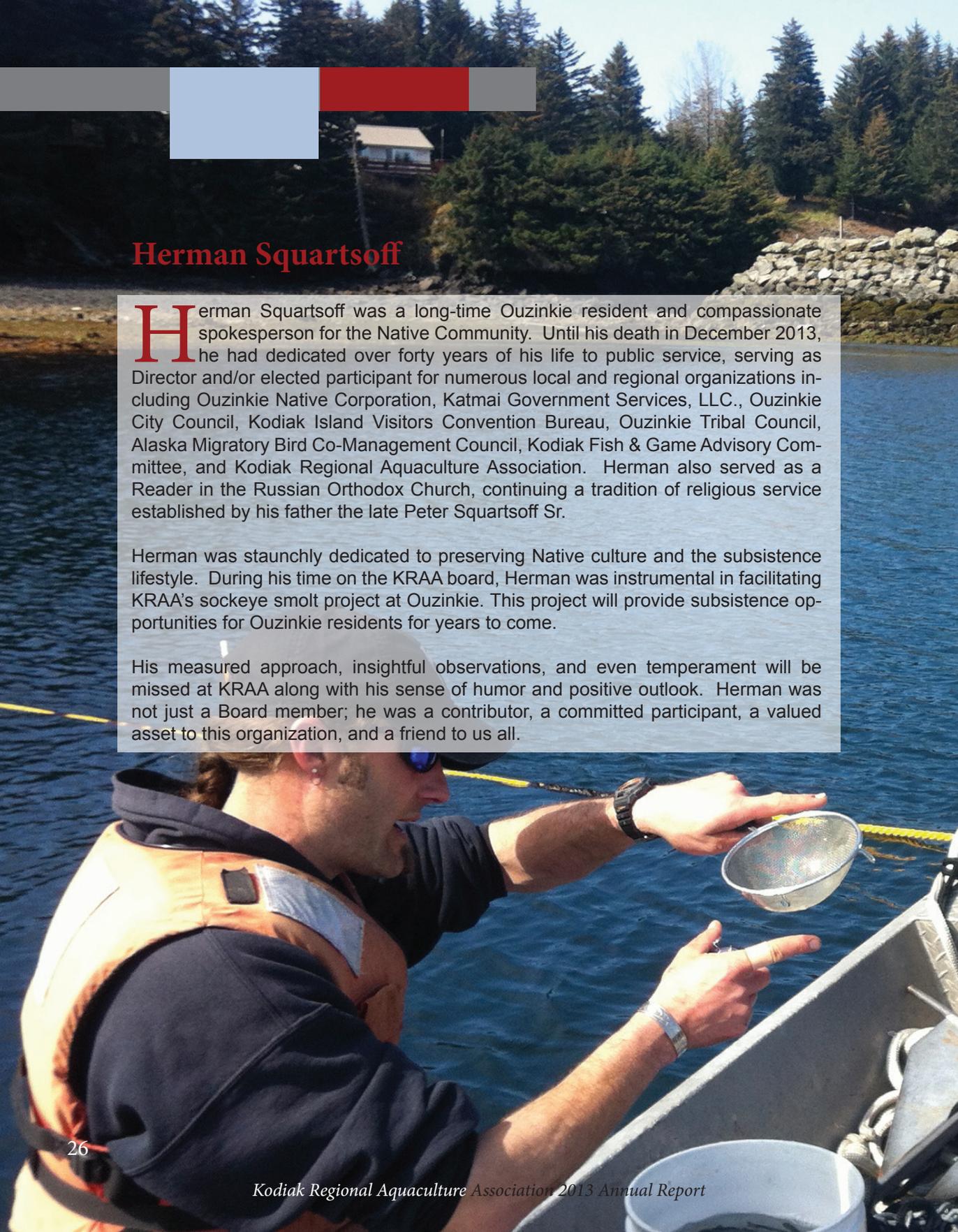


Total Expenses for Fiscal Year 2013 (July 1, 2012 - June 30, 2013) for all Kodiak Regional Aquaculture Association programs \$ 4,277,439



Photo by : Jodi Estrada

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## Herman Squartsoff

**H**erman Squartsoff was a long-time Ouzinkie resident and compassionate spokesperson for the Native Community. Until his death in December 2013, he had dedicated over forty years of his life to public service, serving as Director and/or elected participant for numerous local and regional organizations including Ouzinkie Native Corporation, Katmai Government Services, LLC., Ouzinkie City Council, Kodiak Island Visitors Convention Bureau, Ouzinkie Tribal Council, Alaska Migratory Bird Co-Management Council, Kodiak Fish & Game Advisory Committee, and Kodiak Regional Aquaculture Association. Herman also served as a Reader in the Russian Orthodox Church, continuing a tradition of religious service established by his father the late Peter Squartsoff Sr.

Herman was staunchly dedicated to preserving Native culture and the subsistence lifestyle. During his time on the KRAA board, Herman was instrumental in facilitating KRAA's sockeye smolt project at Ouzinkie. This project will provide subsistence opportunities for Ouzinkie residents for years to come.

His measured approach, insightful observations, and even temperament will be missed at KRAA along with his sense of humor and positive outlook. Herman was not just a Board member; he was a contributor, a committed participant, a valued asset to this organization, and a friend to us all.



Photo by : Trent Dodson

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## 2014 Staff

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TRENTEN DODSON	PRODUCTION AND OPERATIONS

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ANDREW WALTER	ASSISTANT MANAGER
JAMES TURMAN	FISH CULTURIST

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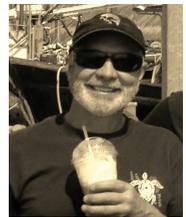
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Any Gear At-Large

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Photo by : Trent Dodson

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