

U.S. Fish & Wildlife Service

# Sport Fish and Wildlife Restoration and Associated Grant Programs

*Program Update March 2004*





# Table of Contents

<b>Assistant Director’s Comments</b> .....	<b>1</b>
<b>Regional Director &amp; CNO Manager, Region 1 Comments</b> .....	<b>3</b>
<b>Regional Director, Region 7 Comments</b> .....	<b>4</b>
<b>Staff Directory, Federal Assistance, Washington, D.C. Office</b> .....	<b>5</b>
<b>Federal Assistance Program, Overview</b> .....	<b>6</b>
<b>Focus on Specific Programs and Activities</b> .....	<b>7</b>
<i>Wallop-Breaux Reauthorization Update</i> .....	<i>7</i>
<i>State Wildlife Grants</i> .....	<i>9</i>
<i>Landowner Incentive Program</i> .....	<i>11</i>
<i>Joint Federal/State Task Force on Federal Assistance Policy</i> .....	<i>12</i>
<i>State Audits</i> .....	<i>13</i>
<i>Boating Infrastructure Grant Program Tier-Two Grants</i> .....	<i>13</i>
<i>Federal Assistance Information Management System (FAIMS)</i> .....	<i>14</i>
<i>National Survey of Fishing, Hunting, and Wildlife-Associated Recreation</i> .....	<i>14</i>
<i>Section 10 Hunter Education Program</i> .....	<i>15</i>
<i>Electronic Grants Management</i> .....	<i>16</i>
<i>National Coastal Wetlands Conservation Grant Program</i> .....	<i>17</i>
<i>Clean Vessel Act Pumpout Grant Program</i> .....	<i>18</i>
<i>Federal Assistance National Training Program</i> .....	<i>19</i>
<i>Public Access Civil Rights Program</i> .....	<i>19</i>
<i>Closing of the Fish &amp; Wildlife Reference Section</i> .....	<i>20</i>
<i>Multistate Conservation Grant Program</i> .....	<i>21</i>
<i>National Coastal Wetlands Conservation Grant Program</i> .....	<i>23</i>
<b>Special Highlight Section of Region 1, Pacific Region</b> .....	<b>29</b>
<b>Special Highlight Section of Region 7, Alaska</b> .....	<b>55</b>
<b>Appendix</b> .....	<b>61</b>

# Assistant Director's Comments

*Paul R. Schmidt*



There is much to reflect upon in the Federal Assistance Program these days. It is a time of excitement and transition. The program is being reshaped and rejuvenated. The Joint Federal-State Policy Task Force continues to make progress in developing policies that will serve to guide the Program into the future. They have considered some of the most knotty issues that have not been well understood and developed guidance that is clear and concise. To date, the Joint Federal-State Policy Task Force has worked to prepare program guidance that have resulted in the issuance of two Director's Orders. Specifically, the Joint Federal-State Policy Task force's input was critical to the development of Director's Order # 152- Allowable Recreational Activities and Related Facilities on Federal Assistance Lands and Director's Order # 156-Budget Changes in Federal Assistance Grants.

The funding for State Wildlife Grant Program and the Landowner Incentive Program continues to grow. The President's Budget for Fiscal Year 2005 includes \$80 million (an increase of 15% over FY 2004) for State Wildlife Grants and \$50 million (an increase of 68% over FY 2004) for Landowner Incentive Program. These funds are being used for conservation on public and private land for the species with the greatest conservation needs.

The prospect of all States and Territories having Comprehensive State Wildlife Conservation Plans by October 2005, is gaining interest and excitement on the part of the entire conservation community. Much needs to be accomplished in 2004 to make this a reality. At the Director's request, several Federal Assistance personnel and I have worked with all of the Service's divisions to inform them about the States fish and wildlife agencies planning efforts that are occurring with the State and Tribal Wildlife Grants program. Our efforts have taken us to every Service regional office, where we

have met with representatives from all of the Service divisions and informed them of the States' planning efforts. In addition, the Director has asked Service personnel to participate and aid the States' efforts as much as possible. In order to be ready to meet the States' planning needs, the Service has worked with the International Association of Fish and Wildlife Agencies (IAFWA), the State fish and wildlife agencies, and NGOs to form Development Assistance Teams. These teams are assisting States with their planning efforts and helping them to overcome the obstacles that their planning efforts face. The Development Assistance Teams are staffed with a combination of Service, IAFWA, and other staff that are well qualified to help States with their efforts.

The Service hopes that 2004 will bring about a successful reauthorization for the Wallop-Breaux funded programs. Reauthorization of the Wallop-Breaux funded programs is critical for the continued efforts of the Service and the Division of Federal Assistance to meet the conservation and recreation demands of our constituents. Division of Federal Assistance personnel have served as technical advisors to the American League of Anglers and Boaters (ALAB) to make sure that the Service's grant programs affected by this legislation were understood by this important group of constituents. Also, the Service has worked closely with the U.S. Coast Guard with their efforts associated with the Recreational Boating Safety Program that is also affected by this legislation. Division personnel attended the National Association of State Boating Law Administrators annual meeting last fall to inform this group about the Service's grant program efforts that are funded from the Aquatic Resources Trust Fund to complement the Recreational Boating Safety program and strive to meet the needs of recreational anglers and boaters.

Two Regional Chiefs for Federal Assistance have announced their retirement plans and the Service has accepted applications for their replacements. Brad Johnson, Region 3 Chief of Federal Assistance, and Bob Cooke, Region 4 Chief of Federal Assistance, announced their plans to retire from their positions with the Service in the coming months. Brad has served as the Region 3 Chief for 8 years. Bob has served as the Region 4 Chief for 16 years. We owe each of these employees a debt of gratitude for their many years of devotion to the Federal Assistance programs and wish them well in their retirement. Their guidance and direction will be missed.

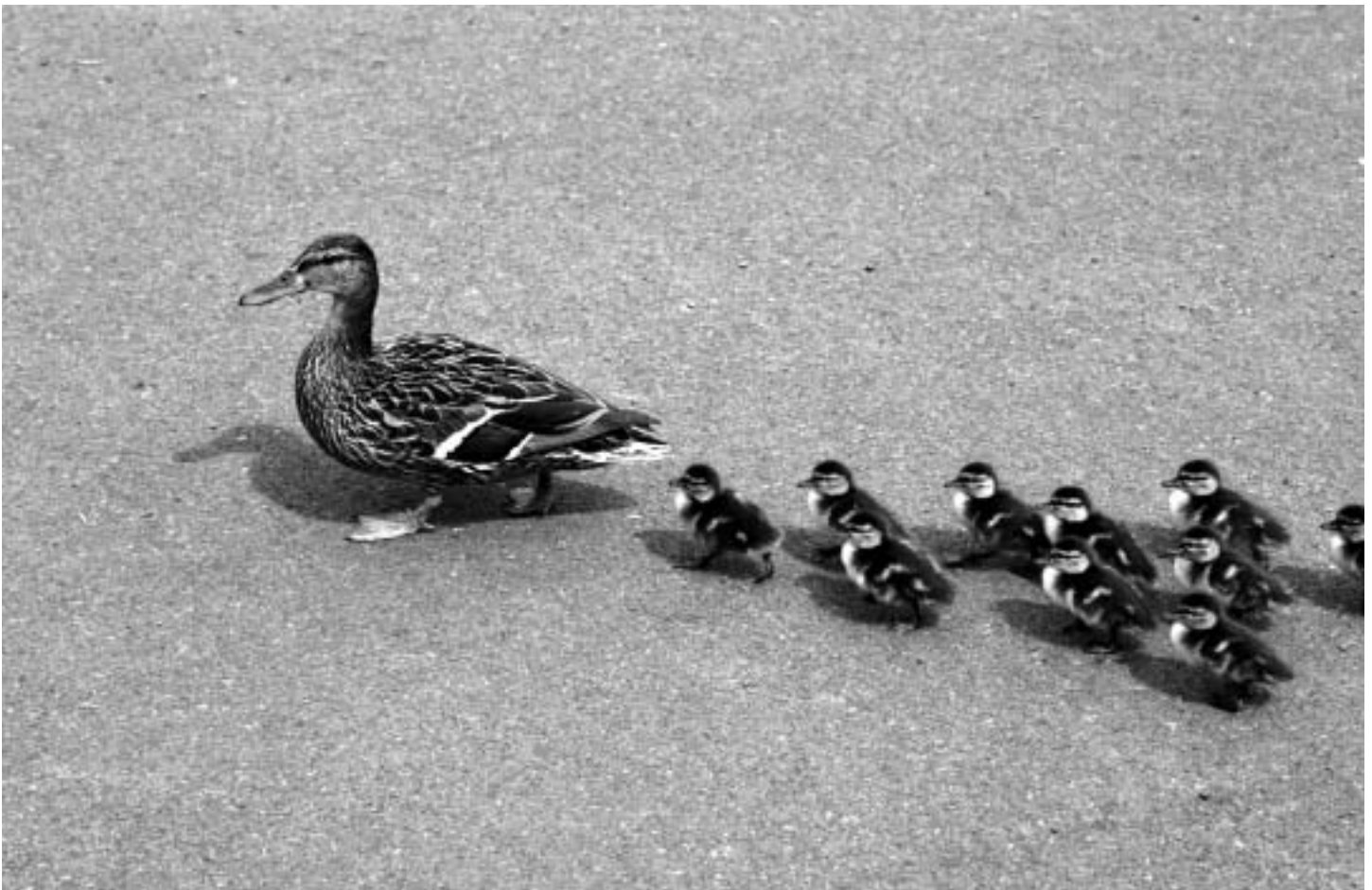
Finally, I am excited about the proactive measures that the Division of Federal Assistance has taken on the many challenges and opportunities over the last few years. While I have heard from many of you about our improved management of our grant programs, I am pleased to announce that the Division of Federal Assistance will soon be conducting a survey with the Federal Consulting Group to gain additional feedback from Service cooperators on the management of the Division. Many of you will soon be asked to participate in this survey and to provide your thoughts on the service that the Division is providing you through its grant programs and your ideas on how this service can be improved, if necessary.

Your input is appreciated and will help to solidify our partnership efforts for the coming years!

I am sure that 2004 will bring some challenges to the Fish and Wildlife Service and to the Division of Federal Assistance. But I am confident that we can face these challenges together with our program cooperators and supporters to meet whatever the year will bring us.

Sincerely,

Paul Schmidt



# Regional Director and CNO Manager Comments

*Pacific Region  
Dave Allen and  
Steve Thompson*



Welcome to the Pacific Region, representing the great western states of California, Idaho, Oregon, Nevada and Washington, the great state of Hawaii and the Pacific Islands.

Wonderful fish and wildlife resource management work is being accomplished in the Pacific Region in true partnership with the States and Pacific Insular Territories. It is an exciting and challenging time to work in fish and wildlife management, and the Federal Assistance programs continue to be a vanguard to our collective efforts. These programs embody the Service's commitment to partnerships, community-based governance and the recognition that active and effective State and Territory leadership in fish and wildlife management is absolutely essential.

Nearly \$800 million is now being transferred to the states nationally through the Fish and Wildlife Service's Federal Assistance programs. In the Pacific Region the two original grant programs funded by anglers, boaters, and hunters — the Wildlife Restoration Program ("PR") and the Sport Fish Restoration Program ("Wallop Breaux"; "DJ") — have grown to \$37.4 million and \$56.1 million, respectively. The Wildlife and Sport Fish Restoration programs have remained a mainstay of state funding because the inherent advantages in the original and visionary legislation: stable funding, license fee protection, partnership opportunities, and a user pay/user benefits approach.

Other, more recent legislative actions have led to a broad menu of opportunities for funding state conservation efforts. These new programs, including the Clean Vessel Act, the Coastal Wetlands Act, the Boating Infrastructure Grant Program, the State Wildlife Grants Program, and the Landowner Incentive Program, together provide over \$130 million for the states, nationwide. In the Pacific Region, states are sharing this year in a total of nearly \$25 million from these relatively new sources of funding.

The Federal Assistance Program has also been increasingly helpful in administering grants from other Fish and Wildlife Service programs: the Tribal Wildlife Grants Program and Tribal Landowner Incentive Program; the Fish Screen Program; the Cooperative Endangered Species Conservation grants to states, including the traditional Conservation Grants, and the Habitat Conservation Planning (HCP) and HCP Land Acquisition grants. In these cases the coordinators of the programs have employed the traditional granting formats used in the past, and have utilized the Federal Assistance Program's data management system (FAIMS) to record grants for financial tracking and for public information through the internet. This has been a great opportunity to increase our partnership with other Fish and Wildlife Divisions, and to educate our own agency personnel about the many good things that have been accomplished with our State partners.

As the nation becomes more aware of the needs and challenges faced by our natural resources, we predict that we will see additional interest in our programs. But as you know—and as we have witnessed through the recent Congressional mandates for State Conservation Plans—Congress and the American people also want accountability and progress on landscape-level strategic planning efforts to set priorities, implement actions, and monitor successes and failures. We believe that we will meet these challenges—together—and that we will continue to have the people's support for the funding tools that we have in hand.

Together, we will succeed in preserving an important heritage, our nation's fish and wildlife resources.

David Allen  
Regional Director, Pacific Region  
and  
Steve Thompson  
California/Nevada Operations Manager  
U.S. Fish and Wildlife Service

# Assistant Director, Region 7 Comments

*Rowan Gould*



Greetings from Alaska; the U.S. Fish and Wildlife Service's Region 7 where opportunities for wild and scenic hunting, fishing and wildlife-dependent recreation are unsurpassed anywhere in the world.

We are fortunate to live among men and who share a passion for fish and wildlife. According to the Service's recent National Survey of Fishing, Hunting and Outdoor Recreation, some 45% of Alaska's residents are active anglers or hunters (and more than 300,000 visitors come to the state specifically to fish or hunt each year), while 53% of our residents pursue wildlife-watching activities (and some 64% of our visitors come to Alaska to see its wildlife.) These figures add up to a state that's well-stocked with people and visitors who value fish and wildlife, and who willingly support programs that will benefit outdoorsmen and -women for generations to come.

As the principal federal agency charged with preserving fish, wildlife, plants and their habitats for those future generations, the U.S. Fish and Wildlife Service is fortunate to belong to a number of partnerships that work to achieve this mission. At the center of these are America's hunters, anglers and other outdoor enthusiasts who, through their purchases of equipment, supplies, and state hunting and fishing licenses, provide much of the funding that finances conservation efforts across the United States.

Other grant programs funded by general Congressional appropriations, such as State Wildlife Grants, Landowner Incentive Program, and Section 6 traditional and new endangered species grants, have

expanded conservation efforts towards species of the greatest conservation need and threatened, endangered, or other species at risk. These funds have provided concrete benefits to anglers, hunters, and other enthusiasts assure that Alaska's fish and wildlife, and related uses will continue to be world-class in the years ahead.

Specifically, in 2003, \$9 million in Wildlife Restoration funds, matched with Alaska Department of Fish and Game hunting license fees, supported more than 40 research, survey, and planning projects, benefiting species from moose to muskoxen and from brown bears to bison, as well as an active hunter education program.

The Sport Fish Restoration program provided \$13 million of funds, with ADF&G fishing license fees, to fund new boat launches and other access improvements; enhanced fisheries by producing millions of both fingerling and catchable-size chinook and coho salmon, arctic char, arctic grayling, and rainbow trout; and funded habitat restoration and enhancement programs that will help Alaska's healthy wild fisheries maintain and improve their productivity.

The State Wildlife Grants program is funding \$3 million of projects promoting the conservation of invertebrates, amphibians, fish, birds and mammals. The Landowner Incentive Program is funding \$1.5 million of conservation easements to protect habitat for threatened Steller's eider habitat and other waterbirds, while over \$200,000 of Endangered Species Section 6 grants support threatened Spectacled eider habitat and northern goshawk research.

# Staff Directory Federal Assistance

## Washington DC Office

**Federal Assistance Main Phone Number**  
703/358 2156

**Web Address**  
<http://federalaid.fws.gov>

**Kris E. LaMontagne**, Division Chief

**Doug Gentile**, Civil Rights Coordinator  
for Public Access

**Jim Greer**, Deputy Division Chief -  
Operations

**Jimmye Kane**, Lead Secretary

**Pam Matthes**, Multistate Conservation  
Grant Program Coordinator

**Hsia Franklin**, Secretary

### *Branch of Budget and Administration*

**Tom Jeffrey**, Branch Chief - Budget  
Development and Execution - Program  
Management

**Mary Jones**, Administrative Officer

**Linda Muhammad**, Program Support  
Assistant

**Tracey Vriens**, Program Analyst

### *Branch of Information Management*

**Bill Conlin**, Branch Chief - Information  
Management - ADP Support - FAIMS

**Dale Beaumariage**, FAIMS Help Desk,  
Grant Administration Training

**Lorinda Bennett**, Fiscal Management -  
Audit Liaison

**Ed Duda**, System Developer

**Jake Goodall**, System Developer

**Jeffrey Graves**, Server Support - Web  
Site Support

**Pete Hitchcock**, Network Engineer;  
Security Officer

**C. J. Huang**, Database Administrator

**Sandie Lehberger**, Administrative  
Technician

**David Washington**, ADP Systems  
Support - ADP Acquisition Support

**Debbie Wircenske**, Help Desk and Fiscal  
Administration Training

**Luther Zachary**, FAIMS Team Leader

### *Branch of Grants Operations and Policy*

**Vacant**, Branch Chief - National Issue  
Management

**Brian Bohnsack**, Sport Fish Restoration  
Program - Coastal Wetlands - Clean  
Vessel Program - Boating  
Infrastructure Grant Program -  
Regions 1 & 2

**Kim Galvan**, Regulations - U. S. Fish and  
Wildlife Service Manual Chapters -  
Section 6 Grants - Regions 4 & 7

**Tim Hess**, Wildlife Restoration Program  
- Landowner Incentive Program - State  
Wildlife Grants - Regions 3 & 5

**Genevieve Pullis**, State Wildlife Grants  
Plan Coordinator

**Joshua Winchell**, Regulations - Aquatic  
Education, Hunter Education, Shooting  
Ranges - Region 6

### *Branch of Audits and Cash Management*

**Pat McHugh**, Branch Chief - Audits -  
Cash Management

**Ord Bargerstock**, Systems Accountant -  
Regions 4 & 5 - Audit Resolution

**Vacant**, Systems Accountant - Regions 1  
& 2 - Lessons Learned - Future Audit  
Plans

**Vacant**, Systems Accountant - Regions 3,  
6, & 7 - Audit Program Oversight

### *Branch of Surveys*

**Sylvia Cabrera**, Branch Chief - National  
Survey of Fishing, Hunting and  
Wildlife-Associated Recreation

**Richard Aiken**, Economist - National  
Survey

**Vacant**, Economist - National Survey

### *Branch of Training*

**Steve Leggans**, Branch Chief

**Julie Schroyer**, Administrative Analyst

**Blake Weirich**, Assistant Training  
Coordinator

**Debbie Unbehagen**, Fiscal Person

### *Intergovernmental Personnel Act (IPA) Agreement*

**Lanny Moore**, On IPA between the U.S.  
Fish and Wildlife Service and the  
International Association of Fish and  
Wildlife Agencies to pursue full-time the  
Internal Revenue Service (IRS), Bureau  
of Alcohol, Tobacco, and Firearms  
(BATF), and Customs Working Group  
initiatives.



# Federal Assistance Program

## *Overview*

The goal of the Federal Assistance Program is to work with States to conserve, protect, and enhance fish, wildlife, their habitats and the hunting, sport fishing, and recreational boating opportunities they provide. The Federal Assistance Program is responsible for administering the following Programs:

- Wildlife Restoration
- Sport Fish Restoration
- Clean Vessel Act
- Boating Infrastructure Grant
- National Coastal Wetlands Conservation Grant

- Multistate Conservation Grant
- State Wildlife Grants
- Landowner Incentive

In addition, Federal Assistance provides grant management support for endangered species traditional section 6, Habitat Conservation Plan (HCP) Land Acquisition, HCP Planning, and Recovery Land Acquisition Grant Programs.

The following is an update on the activities of the Federal Assistance Program and these grant programs.



# Focus on Specific Programs and Activities

## Wallop-Breaux Reauthorization Efforts Continuing

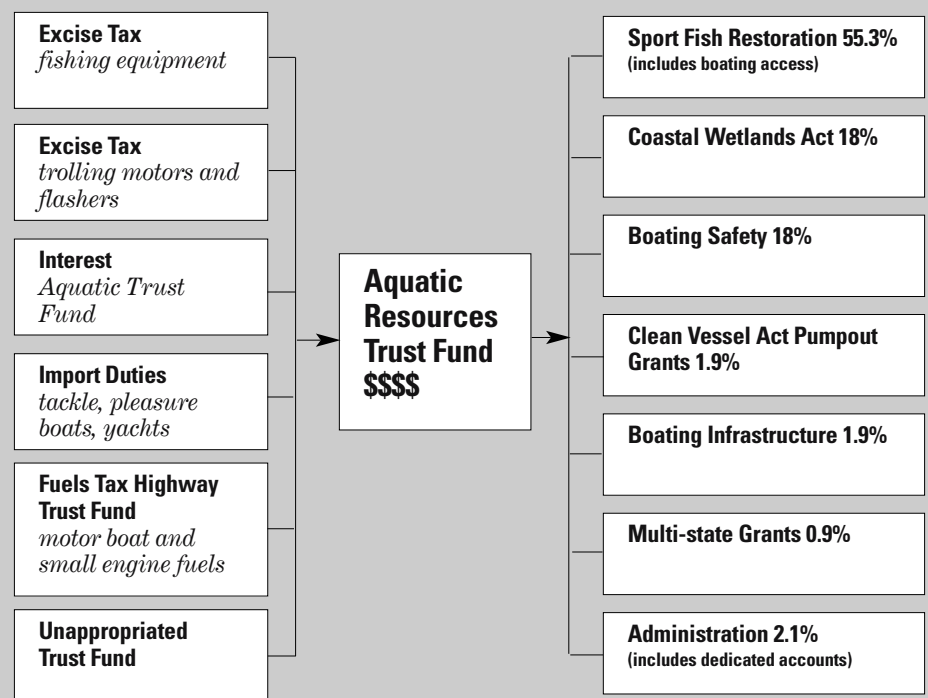
Efforts to reauthorize several grant programs funded through the Aquatic Resources Trust Fund and the accompanying Sport Fish Restoration Account are continuing and have intensified in recent months. These efforts are being led by Senator Breaux and his staff, as well as the American League of Anglers and Boaters (ALAB). Significant action on the reauthorization is expected to occur in February when Congress has tentatively scheduled to hear the Safe, Accountable, Flexible, and Efficient Transportation Equity Act (SAFETEA)(Senate Bill 1072).

This round of reauthorization efforts is proving to be more complicated than previous years due to delays and that the reauthorization proposal is included in several proposed bills. ALAB and its member groups, such as the International Association of Fish and

Wildlife Agencies, American Sportfishing Association, States Organization for Boating Access, National Association of State Boating Law Administrators, were successful with lobbying Congress to get an temporary extension of the programs authorized by the TEA-21 legislation. Specifically, the Clean Vessel Act (CVA) grant program, Boating Infrastructure Grant (BIG) program, National Outreach and Communications Program (NOCP), which provides funding for the Recreational Boating and Fishing Foundation, and the U.S. Coast Guard's Recreational Boating Safety (RBS) program were authorized through February 2004. Congress' extension of these programs provided only 5/12th of their normal annual allocation. In order for these programs to continue and to receive their normal funding allocation, Congress will need to extend their authorization for the remainder of Federal Fiscal Year 2004 and approve associated funding.

*If approved by Congress, the ALAB consensus proposal will change the process for grant programs funded through the Aquatic Resources Trust Fund to the percentages identified here.*

## Aquatic Resources Trust Fund (ALAB proposal)



Senate Bill 1804- Sport Fishing and Recreational Boating Safety Act was introduced into the Senate in October by Senator Breaux. At the time of this article, the bill had two cosponsors (Senators Hollings and Lott). This bill encompasses most of the ALAB consensus proposal. Other parts of ALAB's consensus proposal are included in House Resolution 2839 (HR 2839), which was introduced into the House of Representatives in July 2003 by Representative Shaw and currently has 22 cosponsors. HR 2839 seeks to transfer the excise taxes attributable to motorboat and small engine fuels into the Aquatic Resources Trust Fund.

If these proposals are passed by Congress, the funding for the Boating Infrastructure Grant Program and the U.S. Coast Guard's Recreational Boating Safety Program are projected to increase. Funding for other programs are expected to maintain their current funding levels or experience slight decreases.

The current and proposed legislation have created some administrative difficulties. Specifically, the Service has to ensure that sufficient funds are available in Federal Fiscal year 2004 for all of the grant programs affected by the pending legislation. More specifically,

the current funding processes used by the Service first provides funding for the BIG, CVA, NOCP, and RBS and then all remaining funds are apportioned to the States by the Federal Aid in Sport Fish Restoration Program. Because of this process and the uncertainty of funding for the various grant programs, the Service may issue a revised final apportionment to the States from the Sport Fish Restoration program later this fiscal year.

For additional information on the Wallop-Breaux reauthorization, contact Brian Bohnsack.



## State Wildlife Grants

The Department of the Interior and Related Agencies Appropriations Act, 2004, signed by President Bush into law on November 10, 2003 included \$70 million in Fiscal Year 2004 for the State and Tribal Wildlife Grants (SWG) program, which is available to States and Territories for obligation until September 30, 2005. In addition to these funds, Fiscal Year 2003 SWG funds previously awarded to States remain available for obligation until September 30, 2004, after which the Service will reappportion any remaining unobligated funds.

The Service designed the SWG program to assist States by providing Federal funds for the development and implementation of programs that benefit wildlife and their habitat, including species that are not hunted or fished. It permits both planning and implementation activities. The Federal share for planning grants may not exceed 75 percent and may not exceed

50 percent for other types of grants. To establish eligibility for these funds, the States and Territories first had to submit or commit to develop by October 1, 2005, a Comprehensive Wildlife Conservation Strategy or Plan. All States and Territories have made this commitment, and all States now have active SWG projects being funded.

A collaborative Work Group formed by the IAFWA distributed additional Plan development guidance for the States and their partners through the October 2003 issuance of a series of white papers on a variety of Plan development topics. Service staff are members of this Work Group, along with IAFWA, State and NGO representatives. At the States' prompting, the Service has established Development Assistance Teams in each Regional office to assist the States when requested and otherwise facilitate development of the Plans. The Service is committed to being a full partner with the States in their development and implementation.

The Director has initiated the formation of a National Acceptance Advisory Team to ensure that the Plans submitted provide the eight essential elements described by Congress (see table below). This Team, consisting of Service, State and IAFWA representatives, will become active in 2004, and will perform in this capacity for the Director through the October 1, 2005 submission deadline.

For additional information on this Program, contact Tim Hess.



### The Eight Elements Required to be Included in State Comprehensive Wildlife Conservation Strategies or Plans.

- 1 Information on the distribution and abundance of species of wildlife, including low and declining populations as the State fish and wildlife agency deems appropriate, that are indicative of the diversity and health of the State's wildlife;
- 2 Descriptions of locations and relative condition of key habitats and community types essential to the conservation of species identified in (1);
- 3 Descriptions of problems which may adversely affect species identified in (1) or their habitats, and priority research and survey efforts needed to identify factors which may assist in restoration and improved conservation of these species and habitats;
- 4 Descriptions of conservation actions determined to be necessary to conserve the identified species and habitats and priorities for implementing such actions;
- 5 Proposed plans for monitoring species identified in (1) and their habitats, for monitoring the effectiveness of the conservation actions proposed in (4), and for adapting these conservation actions to respond appropriately to new information or changing conditions;
- 6 Descriptions of procedures to review the Strategy-Plan at intervals not to exceed ten years;
- 7 Plans for coordinating, to the extent feasible, the development, implementation, review, and revision of the Strategy-Plan with Federal, State, and local agencies and Indian tribes that manage significant land and water areas within the State or administer programs that significantly affect the conservation of identified species and habitats; and
- 8 A description of broad public participation during the development and implementation of these Strategies-Plans.

**State Wildlife Grants Apportionment  
FY 2004**

<i>State</i>	<i>Land Area</i>	<i>Population</i>	<i>Amount</i>
Alabama	51,700	4,447,100	\$ 950,854
Alaska	589,192	626,932	\$ 3,060,095
American Samoa	-	-	\$ 153,004
Arizona	113,998	5,130,632	\$ 1,449,489
Arkansas	53,178	2,673,400	\$ 714,925
California	158,633	33,871,648	\$ 3,060,095
Colorado	104,093	4,301,261	\$ 1,270,452
Connecticut	5,006	3,405,565	\$ 612,020
Delaware	2,026	783,600	\$ 612,020
District of Columbia	-	-	\$ 306,009
Florida	58,599	15,982,378	\$ 2,592,298
Georgia	58,922	8,186,453	\$ 1,515,288
Guam	-	-	\$ 153,004
Hawaii	6,461	1,211,537	\$ 612,020
Idaho	83,570	1,293,953	\$ 721,085
Illinois	56,339	12,419,293	\$ 2,084,443
Indiana	36,183	6,080,485	\$ 1,076,313
Iowa	56,271	2,926,324	\$ 769,994
Kansas	82,277	2,688,418	\$ 905,720
Kentucky	40,409	4,041,769	\$ 821,523
Louisiana	47,716	4,468,976	\$ 928,044
Maine	33,125	1,274,923	\$ 612,020
Maryland	10,454	5,296,486	\$ 800,932
Massachusetts	8,263	6,349,097	\$ 932,424
Michigan	58,415	9,938,444	\$ 1,754,509
Minnesota	84,392	4,919,479	\$ 1,228,258
Mississippi	47,692	2,844,658	\$ 703,052
Missouri	69,704	5,595,211	\$ 1,226,536
Montana	147,042	902,195	\$ 1,078,493
N. Mariana Islands	-	-	\$ 153,004
Nebraska	77,353	1,711,263	\$ 738,529
Nevada	110,560	1,998,257	\$ 993,612
New Hampshire	9,282	1,235,786	\$ 612,020
New Jersey	7,813	8,414,350	\$ 1,215,376
New Mexico	121,589	1,819,046	\$ 1,040,333
New York	49,109	18,976,457	\$ 2,945,190
North Carolina	52,671	8,049,313	\$ 1,455,766
North Dakota	70,700	642,200	\$ 612,020
Ohio	41,326	11,353,140	\$ 1,839,503
Oklahoma	69,898	3,450,654	\$ 930,946
Oregon	97,046	3,421,399	\$ 1,102,960
Pennsylvania	45,306	12,281,054	\$ 1,993,755
Puerto Rico	-	-	\$ 306,009
Rhode Island	1,223	1,048,319	\$ 612,020
South Carolina	31,117	4,012,012	\$ 757,142
South Dakota	77,116	754,844	\$ 612,020
Tennessee	42,143	5,689,283	\$ 1,060,816
Texas	266,852	20,851,820	\$ 3,060,095
Utah	84,898	2,233,169	\$ 859,703
Vermont	9,615	608,827	\$ 612,020
Virgin Islands	-	-	\$ 153,004
Virginia	40,600	7,078,515	\$ 1,243,105
Washington	68,097	5,894,121	\$ 1,257,489
West Virginia	24,230	1,808,344	\$ 612,020
Wisconsin	56,140	5,363,675	\$ 1,106,520
Wyoming	97,813	493,782	\$ 612,020
<b>Total</b>			<b>\$61,201,916</b>

*Note: FY 2004 Apportionment includes \$64,641 in reverted FY 2002 State Wildlife Grant funds.*

## Landowner Incentive Program

Congress funded the Landowner Incentive Program (LIP), authorized in the Department of the Interior and Related Agencies Appropriations Act, 2004, with \$30 million derived from the Land and Water Conservation Fund. The Fiscal Year 2004 fund awards were made based on the 75 program applications received prior to the October 15, 2003 deadline. This program provides competitive matching grants to States, Territories, the District of Columbia, and Tribes. The Service allocated \$2.9 million to Tribes, \$25.8 million to the States and Territories, and \$1.3 million for Congressional rescissions and administrative costs in Fiscal Year 2004 and plans to allocate any Fiscal Year 2005 funds in a similar manner. The grants are to establish or supplement landowner incentive programs that provide technical and financial assistance to private landowners for projects that protect and restore habitats of listed species or species determined to be at-risk. LIP projects involve activities such as the restoration of marginal farmlands to wetlands, the removal of exotic plants to restore natural prairies, a change in grazing practices and fencing to enhance important riparian habitats, instream structural improvements to benefit aquatic species, road closures to protect habitats and reduce harassment of wildlife, and conservation easements. The Service requires a minimum 25 percent non-Federal share of project costs.

The Program features two levels of funding, Tier-1 and Tier-2. Proposals can be submitted for either Tier-1 or Tier-2 competition (or both), with a maximum amount awarded to any individual State not to exceed 5 percent of the total funds available. Tier-1 grants (capped at \$180,000 per State and \$75,000 for D.C. and the Territories) are intended to provide a base for States to fund staff and associated costs necessary to develop a new or enhance

an existing landowner incentive program. Tier-2 grants are intended to 'implement' State landowner incentive programs by providing technical or financial assistance to private landowners through a variety of means to support on-the-ground projects.

As of February 2004, 42 of the States that received awards in Fiscal Year 2003 have obligated funds through one or more grant agreements. On August 15, 2003, the Service published a notice and a 60-day Request for Proposals in the Federal Register in anticipation of a Fiscal Year 2004 appropriation for this Program. Implementation and proposal submission guidelines were nearly identical to those used to solicit proposals for and award Fiscal Year

2003 funds to States and Territories. On February 25, 2004, the Secretary announced \$25.8 million from the Fiscal Year 2004 budget had been awarded to 40 of the 43 States that had submitted project proposals.

The Service continues to work with the States and other Federal agencies to streamline the program as much as possible, and to work with other Federal programs impacting wildlife conservation on private lands, such as those supported by the Farm Bill, to ensure complementary implementation of wildlife conservation actions to the extent possible.

For more information on this Program, contact Kim Galvan or Tim Hess.



## Joint Federal/State Task Force on Federal Assistance Policy

As reported in the Program Update March 2003, the Joint Federal/State Task Force on Federal Assistance Policy (JTF) was created to provide a forum to cooperatively identify Program issues of national significance and to develop jointly recommendations concerning those issues. The JTF is composed of seven State fish and wildlife agency and seven Service personnel along with two lawyers (one State and one Federal). The first products of the JTF were announced by the Director in a memo to the Regions dated July 25, 2003. That memo transmitted Director's Orders Nos. 152 and 156. Copies of these Director's Orders can also be viewed and retrieved from the Service's Policy and Directives Management web page located at <http://policy.fws.gov/do.html>. Director's Orders are listed in numerical order on this web page.

As a result of subsequent meetings, the JTF has recommended to the Director policy guidance in the form of Director's Orders for three additional issues:

1. Program Income from Federal Assistance Grants;
2. Allowable Commercial Activities and Related Facilities on Federal Assistance Lands; and
3. Useful Life of Capital Improvements Funded by Federal Assistance Grants.

Policy guidance in the form of a policy memorandum also has been recommended to the Director for, "Guidance for Conducting Endangered Species Act Section 7 Consultation on Federal Assistance Grants to States." These draft policies were provided to Service Regions and State fish and wildlife agencies for comment. The draft recommendations were then revised taking into consideration comments received. The final recommendations of the JTF, along with a summary of the comments, have been submitted to the Director.

Similarly, two additional draft policy statements in the form of Director's Orders were provided to Service Regions and State fish and wildlife agencies for comment this winter:

1. Level of Cost Accounting and Financial Reporting; and
2. The Establishment of and Use of Land Value as Match.

Comments received on these drafts were discussed at the most recent meeting of the JTF in Las Vegas, NV, on January 13-15, 2004. The draft documents were revised by the JTF based on comments received and will be forwarded to the Director along with a summary of comments. Additional actions taken by the JTF at the January meeting include:

- Approved draft Director's Order on "Effective Dates for Federal Assistance Grants," to be posted on the Internet for comment.

- Deferred making any policy recommendation on boating access as this issue requires policy discussions/decisions beyond the scope of the JTF.
- Decided to incorporate language to clarify the issue of program income as it relates to grantees versus subgrantees in the draft Director's Order, "Program Income from Federal Assistance Grants," rather than draft separate policy guidance on this issue.
- Assigned writing a whitepaper and draft Director's Order for the next JTF meeting in April on the following issues:
  - Project Overmatch.
  - In-kind Match for Paid Hunter Education Instructors.
  - Law Enforcement Charges.
  - Pest/Weed Control on Federal Assistance Lands (Includes West Nile Virus).
  - Three Percent Central Services.
- Assigned developing a written opinion on how to best address the issues of, "Land Disposal" and "Consolidation of Federal Assistance Vehicles into Centralized Motor Pools".

For additional information on the JTF, please contact Gary Reinitz.



## State Audits Update

The Service is well into the next cycle of state audits with fifteen current audits in process. To date we have received four final reports from the DOI Office of Inspector General. Our experiences and early feedback from auditees has been very positive. We will continue to work hard to maintain open lines of communication between the auditors, grantees, and Federal Assistance offices.

Our audit policies are in the final stages of review and will soon become part of the Service's Manual. The chapters establish policy and responsibilities for grantee audits, define terms associated with audits, and provide an overview of the audit process. In addition, they establish policies and procedures for audit objectives, planning, conducting, reporting, resolution, and appeals. The establishment of these policies and procedures will enhance the ongoing audit process.

Chapter 1 provides terms associated with audits and an overview of the audit process. Chapter 2 identifies the programmatic and financial elements of audits. Chapter 3 provides procedures for conducting and reporting on audits of Federal Assistance Program

grantees. Chapter 4 establishes policy and procedures for resolving findings and implementing recommendations. Included in this chapter are time-lines of the audit resolution process. Chapter 5 establishes policy and procedures for appealing Service determinations or corrective actions. Chapter 6 establishes Service policy for resolving findings and implementing recommendations from audits of Federal Assistance Program grantees under the Single Audit Act. The audit chapters will enhance the Service's ability to complete audits in a timely manner.

For additional information on this issue, please contact Pat McHugh.

## Boating Infrastructure Grant Program

The U.S. Fish and Wildlife Service awarded the California Department of Boating and Waterways \$859,000 of Tier-2 funds from the Boating Infrastructure Grant (BIG) program for its proposed project to improve access to the San Francisco waterfront. The proposed project is a public/private partnership that includes the California Department of Boating and Waterways, the Port of San Francisco, and the Pier 39 Ltd. The project's partners are

providing an additional \$1.7 million in funding and in-kind services for the proposed project.

The BIG program has two levels of funding, including the Tier-1 and Tier-2. Under the Tier-1 portion, all states and territories can receive up to \$100,000 for docking facilities for transient, non-trailerable boats without competing against other proposals. Thirty states and two territories requested funding for the Tier-1 portion of the program this fiscal year and will receive approximately \$3.07 million of funding. The Tier-2 portion of the BIG program provides for larger projects to compete for available funding.

The Tier-2 portion of the BIG program is one of the Service's most competitive grant programs.

The Service received 32 proposals from 17 states requesting a total of \$17.8 million of federal funding from the Tier-2 portion of the BIG program this year. Due to current funding limitations, approximately \$1 million was available for Tier-2 projects.

For more information on this issue, please contact Brian Bohnsack.





## Federal Assistance Information Management System (FAIMS)

The Federal Assistance Information Management System (FAIMS) is used by Fish and Wildlife Service personnel to manage the complete life cycle of grants administered by the Service. FAIMS is critical to the reconciliation of grant related fiscal information that exists in systems operated by the Department of Health and Human Services, the Division of Federal Assistance, and the Division of Finance. The checks and balances built into FAIMS ensure the integrity of Federal Assistance's fiscal data as confirmed by the audit firm KPMG.

In Fiscal Year 2004 emphasis in FAIMS will be placed on:

- **Attaining Certification and Accreditation.** Various governmental laws require that Federal Information Technology (IT) systems be put through rigorous evaluation processes to ensure their security. FAIMS was authorized to operate under Fish and Wildlife Service procedures in affect at the time the system was deployed. An increased emphasis on IT security in the Federal government has resulted in new compliance requirements. FAIMS security must be reevaluated under new guidance issued by the Department of Interior. Numerous activities required to achieve full Certification and Accreditation from the Assistant Secretary must be completed by the end of September 2004.
- **Consolidating the FAIMS databases.** The number of servers required to operate the production FAIMS databases will be reduced from ten to four. The reduction will simplify operations and maintenance, reduce the cost of operations, and facilitate easier disaster recovery.
- **Developing training methods and materials for users of the iFAIMS web site.** The distributed nature of

the user community of the iFAIMS web site requires development of new training methods and materials for site users.

## National Survey of Fishing, Hunting, and Wildlife Associated Recreation

The 2001 Survey was the 10th managed by the U.S. Fish and Wildlife Service since 1955. The Service has sponsored the survey every five years at the request of State fish and wildlife agencies. It has become one of the Nation's most important sources of information on wildlife-related recreation.

After reviewing options for the next survey, the IAFWA's National Survey Working Group recommended the Fish and Wildlife Service's proposals to manage the 2006 Survey and the Census Bureau to collect the information. At the IAFWA's annual meeting in September 2003, the Committee on National Grants recommended Option VI for data collection which includes a screening sample size of about 90,000 households and detailed samples of 31,500 sportsmen and 24,300 wildlife watchers.

The 2006 Survey will be similar in scope and methodology to those conducted in 1991, 1996, and 2001— so their estimates will be comparable. The Census Bureau will collect the information through computer-assisted telephone and in-person interviews in April and September 2006, and in January 2007.

The survey will be funded by grants from the multistate conservation grant programs of the Wildlife and Sport Fish Restoration Programs. The products will include preliminary reports, final national and 50 state reports, CDs with the data base, and quick facts brochures. All data and reports also will be available on a website.

The Service has begun planning the 2006 Survey. This spring we will meet

with state representatives from the 50 state fish and wildlife agencies, and with national non-governmental organizations. These key survey users will advise us on specific information needed on participation and expenditures for wildlife-related recreation and will make recommendations on how to improve survey products and reporting.

The Service also is analyzing and producing reports based on 2001 survey data. Three addenda to the 2001 Survey produced in 2003 were *Birding in the United States, A Demographic Economic Analysis; 2001 National and State Economic Impacts of Wildlife Watching and Net Economic Values for Wildlife-Related Recreation in 2001*. Analysis in early 2004 includes a detailed trends report and a report on the participation and expenditures of females, Hispanics, and African-Americans.

Copies of the survey reports are available on request or are accessible through the following website: <http://federalaid.fws.gov>. For more information you also may contact Sylvia Cabrera.



## Section 10 Hunter Education Program

### Continuing Success of the Hunter Education/Shooting Range Enhancement Program

Section 10 funding, as outlined in the Wildlife and Sportfish Restoration Programs Improvement Act of 2000, provides for the enhancement of state hunter education and shooting programs. Increasing numbers of states have utilized this source of funding to support and expand their efforts in providing high-quality hunter education courses as well as safe, public shooting opportunities. During 2003 states utilized \$810,380 of Section 10 funds to construct 11 new ranges, \$278,062 to operate and maintain 10 additional ranges, and \$376,103 for other hunter education and shooting range enhancements. Here is a sample of State activities supported with Section 10 funds:

#### Arkansas

Over the past three years, the Arkansas Fish and Game Commission utilized Section 10 funds totaling approximately \$223,000 to increase public involvement

in the State's Hunter Education Program and meet the public demand for enhancement of shooting ranges and equipment. During this time period, Arkansas completed three projects that include:

- (1) construction of a 200-yard shooting range on Scatter Creek Wildlife Management Area in Greene County to serve 5,000 enthusiasts annually;
- (2) enhancement of the Mayflower Shooting Range in Faulkner County by constructing four multi-use buildings and updating the shooting range to become handicap accessible, and
- (3) updating trap and skeet machines at the Mayflower Shooting Range and purchasing three mobile trap and skeet shooting trailers for use at other ranges.

#### Maryland

The Maryland DNR used Section 10 Hunter Education funds to provide small grants to private, non-profit shooting clubs for small-scale but critical improvements and enhancements to their ranges. Grant recipients have used the funds to upgrade and enhance their facilities in a variety of ways. Some have expanded the types of shooting opportunities available at their ranges, others have

increased the number of shooting benches to serve more shooters. Other grant recipients used the funds to better provide for handicapped access or improved the overall safety of their range.

#### North Dakota

In conjunction with the North Dakota Fish and Game Commission, the Minot Rifle and Pistol Club is developing a new indoor shooting facility with air-filtration system, bullet trap retrieval system, accessible restroom, and additional parking. In the community of Bismarck, the Bismarck-Mandan Rifle and Pistol Association is constructing a classroom addition to an existing facility, repairing targets, improving safety berms, and renovating a firing line canopy. Also in the community of Bismarck, the Nishu Bowmen Club is constructing an indoor archery range. Each of these facilities will be open to the public and will be available to hunter education students for live fire training portion of the class.

For additional information on this program, please contact Joshua Winchell.

*As a result of the increased funding for hunter education programs, many states are expanding their programs, including this rifle class in Florida.*



## **Federal Government Moves Towards Electronic Grants Management: Service Grant Programs Coming On-line**

Over the past few years, government-wide efforts have been underway to standardize and streamline Federal financial assistance processes, as required by the Federal Financial Management Improvement Act of 1999, commonly referred to as Public Law 106-107. The Act has far reaching ramifications that require the federal government to improve the effectiveness and performance of financial assistance programs, simplify the application and reporting requirements, improve the delivery of services to the public, and facilitate greater coordination amongst the federal government's grant agencies.

The Fish and Wildlife Service's Division of Federal Assistance has been involved with the government-wide efforts since their beginning. Division personnel have helped lead the Fish and Wildlife Service's efforts to comply with the initiatives mandated by this Act. In addition to working with other Service divisions that issue grants, Division personnel are also participating in work groups within the Department of Interior (DOI) that are striving to

improve coordination and standardization of grants management processes between DOI bureaus.

As a result of the Division personnel's involvement in the government-wide compliance efforts, several improvements within the grants management processes have occurred. Specifically, the Director has provided his support to two primary initiatives:

- Implementing a standard format for financial assistance program announcements; and,
- Posting synopses of program announcements on the internet at Grants.gov FIND (<http://fedgrants.gov>).

The purpose of these initiatives is to have Government-wide consistency that will make it easier for potential applicants to find information on Federal financial assistance opportunities. Grants.gov FIND provides a central electronic venue for synopses of announcements for Federal financial assistance funding opportunities.

In December 2003, the Clean Vessel Act Grant Program announced its 2004 funding opportunity on Grants.gov. Grants.gov is one of the 24 Federal cross-agency E-Government initiatives

focused on improving access to services via the Internet. The site allows organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies. You can even register to receive notification of future grant opportunities. The vision for Grants.gov is to produce a simple, unified source to electronically find, apply for, and manage grant opportunities. Over the next 12 months, the Service will be working with Grants.gov to enable grant applications to be submitted electronically.

The Service has already experienced increased interest from the public and many new potential constituencies as a result of the information posted on Grants.gov. Several requests from local governments and state agencies have resulted in the Service's posting of the Clean Vessel Act program information. This trend is likely to increase as more grant programs post information onto this site. Ultimately, the Service's State cooperators are likely to receive increased requests from funding from local governments, communities and individuals as they become aware of the many grant programs available from the Service.

For additional information on this issue, contact Lori Bennett.

## **National Coastal Wetlands Conservation Grant Program**

The U.S. Fish and Wildlife Service awarded nearly \$17 million in grants from the National Coastal Wetlands Conservation grant program in Fiscal Year 2004 to ten states to conserve, restore and protect coastal wetlands. States awarded grants for fiscal year 2004 under the National Coastal Wetlands Conservation Grant Program are Alabama, Alaska, Connecticut, Florida, Massachusetts, New Jersey, South Carolina, Texas, Virginia and Washington. The grants will be supplemented by more than \$42 million from state and private partners. Partners in this year's Coastal Wetlands Conservation Grants projects include state natural resources agencies, Native American tribes and trusts, county and local governments, private landowners, and conservation groups such as Rocky Mountain Elk Foundation, Ducks Unlimited and The Nature Conservancy.

To date, the Service has awarded more than \$139 million in grants to 25 states and one U.S. territory under the National Coastal Wetlands Conservation Grant Program. When the 2004 grants projects are complete, they will have protected and/or restored more than 19,000 acres. About 167,000 acres will have been protected or restored since the wetlands grant program began in 1990.



## Clean Vessel Act Grant Program

Funding and authorization for the Clean Vessel Act was extended into Federal Fiscal Year 2004 by the Surface Transportation Act of 2003. This Act was passed as an emergency stopgap measure by Congress in late September 2003 to maintain funding for programs authorized and funded through the TEA-21 legislation. The Surface Transportation Act extended the authorization and funding for the CVA program, as well as others, into February 2004. More specifically, the Surface Transportation Act authorized 5/12ths of the normal funding for this program. Accordingly, the current allocation for the CVA program in Fiscal Year 2004 is \$4,166,667.

Despite the limited funds, the Service requested proposals from the States on the normal cycle for this program. Grant proposals were received by the Service in early January and are currently being reviewed by the Service and an inter-agency review panel. The Service received 32 proposals from 22 States requesting \$13.6 million for the available funds. The Service plans to announce the grant awards in late March or early April.

The Clean Vessel Act grant program has been one of the Service's most stable competitive grant programs in terms of consistent funding. This has allowed States to develop many successful programs at the state level. For example, the Ohio Department of Natural Resources, Division of Watercraft was recognized by the State

Organization for Boating Access Association at their national meeting this past September by awarding them their "State CVA Program Excellence Award" at their 2003 Conference in Erie, Pennsylvania. This award was for completing 46 pump-outs since taking over the program from the Health Department in 1999. Ohio has provided over \$900,000 of federal and state monies to provide pump-outs throughout the state.

If Congress acts to authorize additional funding for this fiscal year, then the Service is likely to increase the award amounts for the individual grant recipients.

For additional information on this grant program, please contact Brian Bohnsack.

*The Ohio Division of Watercraft received the "State CVA Program Excellence Award" from the States Organization for Boating Access (SOBA) at its national meeting in 2003. Ohio has spent more than \$900,000 of federal and state funds in recent years developing sewage pumpout facilities throughout the state.*



## **Federal Assistance National Training Program**

The National Federal Assistance Training Program, located at the National Conservation Training Center in Shepherdstown, WV, is part of the Washington Office of Federal Assistance. The training program develops and delivers grants management training for Federal Assistance staff and State fish and wildlife agency grantees. These training courses increase the knowledge, skills and abilities of State and Federal personnel who manage Federal Assistance grants. This training helps to ensure that Federal Assistance grant managers consistently apply the laws, rules, and policies that govern Federal Assistance Program administration.

Since 1996, more than 1,238 State and Federal Assistance grant managers and grantees have received training through courses developed by, or offered in cooperation with, the Federal Assistance Training Program. The majority of those trained have completed Basic Grants Management (348 graduates) or the Project Leaders Course (455 graduates). Additional courses offered include: Federal Assistance Audit Training for Auditors, Boating Facilities Grant Workshop, Audit Training Workshop for State Federal Assistance Coordinators, and Group Systems Leader (Electronic Meeting Facilitator) Training.

A Basic Grants Management Course is offered each year. Interest and demand for the State specific Federal Assistance Project Leaders Course continues to grow. Eight Project Leaders Courses were completed in Fiscal Year 2003. Two Project Leaders Courses were completed through December in Fiscal Year 2004, with additional courses planned through September 2004.

Three new courses are being developed: 1) Fiscal Management of Federal Assistance Grants, 2) Compliance Issues, and 3) Basic Grants Management for Tribal Grants.

Course descriptions, an on-line application, training materials, and grant manager's resources are available on the Federal Assistance Training Program web site at: <http://training.fws.gov/fedaid/>.

For additional information contact Steve Leggans at the National Conservation Training Center at 304/876 7927.

## **Public Access Civil Rights Program**

The Division of Federal Assistance has the responsibility for ensuring that State fish and wildlife agencies provide equal access to their programs, activities and services on the bases of race, color, national origin, age, disability and sex (in educational programs). The Division investigates complaints filed by public beneficiaries of the State agency programs, attempts to resolve civil rights conflicts between the public beneficiaries and the States, and issues decisions on these complaints, often in conjunction with the Departmental Office for Equal Opportunity. In addition, the Division coordinates systemic reviews of State agency civil rights activities. The primary focus of these reviews is to ensure that minority beneficiaries are included in the full range of State activities in proportion to their population in that State; ensure that women have equal opportunities to participate in educational activities such as hunter and aquatic education; ensure that structural and programmatic barriers to persons with disabilities are removed to permit disabled beneficiaries to participate on equal footing in State programs; and ensure that complaint processing procedures are operational at the State level, and that the public is notified of their rights.

The Department often asks the Division to assist them with investigations of public access complaints filed against the Service. The Division processes an average of 30-50 new public access complaints per year, and conducts an average of seven systemic reviews per year. Technical guidance and training are provided to State officials, the public, and a variety of customers on best practices in civil rights, and to ensure that no community is left behind regarding access to the State programs. The Service considers the States full partners in seeking solutions to address any civil rights deficiencies, or resolving conflicts between various parties.

The program requires that state program beneficiaries who have limited English proficiency are provided equal program access. While encouraging proficiency in the English language, the Service recognizes that a percentage of the population may need a transitional period to receive information in alternative languages, to ensure equal access. Another key civil rights requirement is to ensure that States do not implement environmental policies and practices which have an adverse impact on minority or low income communities. The Division facilitates liaisons and partnerships between State agency officials and minority, disability and women's groups. These liaisons and partnerships help assure equal access for all persons, create forums for early intervention and mutual problem-solving, and promote conservation and recreational programs in a more expansive population base.

For more information, please contact Doug Gentile, the Service's Civil Rights Coordinator for public access.

## Fish & Wildlife Reference Service Closes

Fish and Wildlife Service's Division of Federal Assistance, as the grant manager and steward of many of the Federally-funded products in the Fish and Wildlife Reference Service (FWRS) collection, is managing the close-out of the collection. The Service has neither the authority nor the funding to continue operating the FWRS; however, it has contributed funds to extend the lease for the property housing the collection for a few months to allow subject matter experts to evaluate the collection, to establish document retention and handling provisions, and to transport the collection in its entirety to a secure storage facility.

The future of the Reference Service will be evaluated and decisions will be dependent on development of new ideas that meet changing user needs, that address emerging technology and that provide a more efficient delivery of services. In the interim, the Service will safeguard the retained collection as it existed through FY 2003. Also, the Service's Federal Assistance Program will collect future grant reports in a format that can be adopted by emerging technologies. The International Association of Fish and Wildlife Agencies (IAFWA) and the Service recognize the importance of the intellectual property in the existing collection and will work together to establish a plan for the collection.

### *Why Closing the FWRS is necessary*

What is now the FWRS was created by the Service in 1965 to receive, index, store and distribute reports produced by state fish and wildlife agencies from studies supported by the Federal Aid in Wildlife and Sport Fish Restoration Programs. These reports are mostly gray literature, generally not published in peer-reviewed journals, and include annual accomplishment reports, final

research reports and other project-related reports. Limited reporting collections also at the FWRS include reports from the Lead Shot/Lead Poisoning Clearinghouse, Boating Access/Boating Facilities Clearinghouse, and the Clean Vessel Act Education/Information Clearinghouse.

Prior to FY 2001, the FWRS was funded with administrative funds from the FWS Division of Federal Assistance. The Wildlife and Sport Fish Restoration Improvement Act of 2000 prohibited this use of these administrative funds for this activity. The Improvement Act did authorize grants of up to \$6 million annually to be made from a priority list

of projects submitted by the International Association of Fish and Wildlife Agencies (IAFWA), which represent the State fish and wildlife agencies. The FWRS was supported by IAFWA under these grants through FY 2003. IAFWA also conducted a study of the FWRS during that period. Based on this study and an increasing concern over the growing budget required to support the FWRS, IAFWA's Committee on National Grants decided not to recommend future funding for the FWRS in 2004.

For more information, please contact Pam Matthes.



## **Multistate Conservation Grant Program**

The Wildlife and Sport Fish Restoration Programs Improvement Act of 2000 (Improvement Act) established a Multistate Conservation Grant Program within the Sport Fish and Wildlife Restoration Programs. The Improvement Act authorizes grants of up to \$3 million annually from funds available under each of the Programs, for a total of up to \$6 million annually. Grants may be made from a priority list of projects submitted to the Service by the International Association of Fish and Wildlife Agencies (IAFWA), representing the State fish and wildlife agencies.

For a project to be considered by the IAFWA and to be eligible for a grant, it must benefit fish and/or wildlife conservation in at least 26 States, a majority of the States in a Fish and Wildlife Service Region, or a Regional association of State fish and wildlife agencies. Also, a grant may be made available to the U.S. Fish and Wildlife Service or to a State or group of States for the purpose of carrying out the National Survey of Fishing, Hunting and Wildlife-Associated Recreation.

For more information, please contact Pam Matthes.



## IAFWA's Priority List of Projects for the 2004 Multistate Conservation Grant Program

The priority list submitted by the IAFWA for funding this Fiscal Year included the following 18 projects, from which the Division of Federal Assistance made grant awards in January 2004:

PR= Pittman-Robertson Wildlife Restoration Act WB=Wallop Breaux (Dingell-Johnson) Sport Fish Restoration Act

Proposal ID	Title of Proposal	Submitted By	Funds Requested						Totals
			FY 2004		FY 2005		FY 2006		
			PR	WB	PR	WB	PR	WB	
04-002*	Propagated Fish in Resource Management: symposium and workshop	American Fisheries Society		\$118,209					\$108,209
04-002*	Factors that Drive Sportfishing License Sales	American Sportfishing Association		\$124,554					\$124,554
04-005*	Becoming an Outdoors-Woman: Educating Women in Farmland Stewardship & Fish and Wildlife-Based Recreation	Becoming an Outdoors-Woman Program; Univ. of WI Stevens Point	\$178,321		\$192,543				\$370,864
04-007*	Multistate Conservation Grant Program Coordination	IAFWA-Executive Committee	\$48,490	\$48,490	\$50,350	\$50,350			\$197,680
04-009*	Coordination of the Farm Bill Conservation Program Implementation	IAFWA-Agricultural Conservation Task Force	\$117,000		\$123,000				\$240,000
04-010*	Coordination of Revisions of the NRCS National Handbook of Conservation Practices	IAFWA-Agricultural Conservation Task Force	\$75,000						\$75,000
04-012*	Trailblazer Adventure Program	US Sportsmen's Alliance	\$80,000	\$80,000	\$80,000	\$80,000			\$320,000
04-013*	Step Outside	National Shooting Sports Foundation	\$78,000	\$78,000					\$157,600
04-014	National Archery in the School Program	National Alliance for the Development of Archery	\$77,000		\$54,000	\$54,000			\$185,000
04-016*	The Cost of Not Hunting and Trapping	IWFWA-Animal Use Issues Committee & Education, Outreach, & Diversity Committee	\$67,860						\$67,860
04-027	Public Opinion on and Attitudes toward Fish & Wildlife Management in the 16 SEAFWA States	SEAFWA, Contractor: Responsive Management	\$172,723	\$172,723					\$345,445
04-041*	State Wildlife Grant Plan Development: National Coordinated Assistance for all 50 States	IWFWA-Teaming with Wildlife Committee	\$74,400	\$24,800	\$74,400	\$24,800			\$198,400
04-043*	The Conservation Communication Team	IWFWA-Education, Outreach & Diversity Committee & the Animal Use Issues Committee	\$30,000	\$30,000					\$60,000
04-046*	Furbearer Management & Regulated Trapping Professional Development Workshops & Communication Planning Sessions for FWS Professionals	IAFWA-Furbearer Resources Task Force and the Education, Outreach & Diversity Committee	\$187,897						\$187,897
04-048	Developing State Aquatic Nuisance Species Management Plans & Strategies for the Southeastern US	Tennessee Wildlife Resources Agency		\$77,500		\$77,500	\$77,500		\$232,500
04-055*	Facilitation & Continuation of the Partnership between the Foundation & our State Partners for the Planning & Implementing of the Hooked On Fishing—Not on Drugs Program	Future Fisherman Foundation		\$128,000		\$172,500	\$197,000		\$497,500
04-035	Project Coordinator for the 2006 National Survey-State-level Data	USFWS	\$190,452	\$190,452	\$172,190	\$172,190			\$725,284
04-040a	2006 National Survey-Option 6** ** FY 2007 funds are \$1,387,387 (PR & WB) ** FY 2008 funds are \$110,454 (PR & WB)	USFWS	\$1,357,387	\$1,357,387	\$1,357,387	\$1,357,387	\$1,357,387	\$1,357,387	\$11,080,004
TOTALS			\$2,735,330	\$2,430,915	\$2,103,870	\$1,934,727	\$1,411,387	\$1,631,887	\$15,183,797

\*Denotes proposal received by more than one IAFWA committee.

## 2004 National Coastal Wetlands Conservation Grant Projects

### Alabama

**Perdido River Estuary Wetlands.** Alabama's Department of Conservation and Natural Resources will acquire 960 acres of coastal wetlands and associated uplands in Baldwin County. This land will become part of a conservation corridor of protected lands in the Perdido River Watershed.

*Partner:* The Nature Conservancy of Alabama.  
*Coastal grant request:* \$1,000,000  
*State share:* \$1,294,065  
*Partner share:* \$ 5,000  
*Total cost:* \$2,299,065



*Brown bears*

### Alaska

**Afognak Coastal Protection Project, Phase II.** Alaska's Department of Natural Resources will acquire 2,100 acres of land on the north coast of Afognak Island. Acquisition of these lands will link state and Federal protected lands, and preserve important habitats for an array of sea birds, sea ducks, anadromous fish, raptors, brown bears, and elk. Northern Afognak's coastline also provides feeding, pupping, and calving habitat for 14 species of marine mammals.

*Partners:* Paul Allen Foundation, Rocky Mountain Elk Foundation, American Land Conservancy, and the Kodiak Brown Bear Trust.  
*Coastal grant request:* \$1,000,000  
*Partner share:* \$1,547,000  
*Total cost:* \$2,547,300

**Gustavus Land Legacy Project: Phase II.** The Alaska Department of Fish and Game will purchase 676 acres along the Salmon River and extending east to the Glacier Bay National Park boundary.

*Partners:* The Nature Conservancy, Gustavus Land Legacy, and Ducks Unlimited.  
*Coastal grant request:* \$1,000,000  
*Partner share:* \$ 450,000  
*Total cost:* \$1,400,000

**Nushagak Bay Watershed Conservation.** Alaskas Department of Natural Resources will acquire conservation easements on 7,000 acres along the entire length of the 4-mile long Agulowak River and extensive shoreline along Lake Aleknagik and Lake Nerka. This project is part of a regional effort to protect anadromous fish habitat in southwest Alaska.

*Partners:* The Conservation Fund and the Nushagak-Mulchatna Wood-Tikchik Land Trust.  
*Coastal grant request:* \$1,000,000  
*State share:* \$ 40,000  
*Partner share:* \$ 682,500  
*Total cost:* \$1,722,500

### Connecticut

**Barn Island Wildlife Management Area Acquisition.** Connecticut's Department of Environmental Protection will acquire 144 acres of an important marsh and upland forest-wetland edge adjacent to the States Barn Island Wildlife



Coastal marsh habitat

Management Area. Located in the easternmost portion of Connecticut, the streams in the project area feed into the Long Island Sound Estuary. A major benefit of this project would be the buffering of an existing 40-year restoration effort in the Wildlife Management Area from additional contamination and hydrologic modification. This acquisition, added to the existing Wildlife Management Area, would create the States largest protected coastal land holding.

*Partners:* The Nature Conservancy, Connecticut Waterfowl Association, New Haven Bird Club, Connecticut Wetlands Restoration Partnership, Town of Stonington, Denison Pequotsepos Nature Center, and the Hartford Audubon Society.

*Coastal grant request:* \$1,000,000

*State share:* \$1,319,400

*Partners share:* \$ 184,600

*Total cost:* \$2,504,000

#### Florida

**Indian River Lagoon.** Florida's Department of Environmental Protection will acquire 105 acres of diverse habitat on the mainland edge of the Indian River Lagoon Estuary in St. Lucie County. Long-term protection of this site will provide habitat for species that use scrub, moist hardwoods, and coastal marsh.

*Partner:* St. Lucie County

*Coastal grant request:* \$ 367,500

*State share:* \$1,102,500

*Partner share:* \$ 70,000

*Total cost:* \$1,540,000

#### Massachusetts

**Quivet Marsh/Crowes Pasture Acquisition.** Massachusetts Department of Environmental Management will protect 386 acres with perpetual conservation easements on wetlands and adjacent uplands on the north shore of Cape Cod within the Towns of Dennis and Brewster. This area is designated as part of the federal Coastal Barrier Resources System and is the largest remaining area of unprotected, undeveloped land on the Cape Cod coast.

*Partners:* Town of Brewster, Town of Dennis, The Compact of Cape Cod Conservation Trusts, Brewster Conservation Trust, Dennis Conservation Trust, Save the Crowe, Association for the Preservation of Cape Cod, Orenda Wildlife Land Trust, and two private landowners.

*Coastal grant request:* \$1,000,000

*State share:* \$ 500,000

*Partner share:* \$6,267,750

*Total cost:* \$7,767,750

**Sandy Neck/Barnstable Marsh Barrier Beach System Land Acquisition and Restoration.** The Massachusetts Department of Environmental Management, in cooperation with the State's Division of Marine Fisheries and the Massachusetts Wetlands Restoration Partnership, will purchase conservation restrictions on 75 acres of barrier beach frontage within the Sandy Neck Barrier Beach wetland complex bordering the north shore of Cape Cod. The towns of Sandwich and Barnstable will ultimately purchase the property. In addition, they will restore 40 acres of tidal saltmarsh by replacing an undersized culvert under a state highway to improve tidal exchange. The project site is in a state-designated Area of Critical

Environmental Concern because it provides exceptional habitat for a diverse array of species. In conjunction with the project, the Barnstable Land Trust and the town of Sandwich will grant conservation restrictions to the state on an additional 244 acres.

*Partners:* Town of Barnstable, Town of Sandwich, The Nature Conservancy, Barnstable Land Trust, Massachusetts Corporate Wetlands Restoration Partnership, the National Oceanographic and Atmospheric Administration, and the Natural Resources Conservation Service.

*Coastal grant request:* \$1,000,000

*State share:* \$ 208,741

*Partner share:* \$ 809,062

*Total cost:* \$2,017,803



*Wintering snow geese*

#### **New Jersey**

**Cheesequake Marsh Acquisition:** The New Jersey Department of Environmental Protection will acquire 234.5 acres in Middlesex County adjacent to Raritan Bay and 3.6 miles from New York City. A large number of migratory and wintering waterfowl depend on Raritan Bay mid-winter concentrations of waterfowl have average over 60,000 birds over the past 20 years. This parcel will be added to the existing 1,359-acre Cheesequake State Park.

*Partners:* American Littoral Society and the National Estuarine Research Reserve Program.

*Coastal grant request:* \$ 999,000

*State share:* \$3,000,000

*Partner share:* \$1,001,000

*Total cost:* \$5,000,000

#### **South Carolina**

**Protection of Maritime Forest, Islands and Hummocks in the Kiawah River Environs.** The Department of Natural Resources will purchase 4 acres and protect by conservation easements 1,111 acres of islands, dunes and wetlands in and near the Kiawah River in Charleston county. The project area falls within the Atlantic Coast Joint Venture Focus Area and addresses the objectives of 4 major migratory bird plans.

*Partners:* Kiawah Island Natural Habitat Conservancy, Kiawah Resort Associates, and Orange Hill Plantation, LLC.

*Coastal grant request:* \$1,000,000

*Partner share:* \$7,203,670

*Total cost:* \$8,203,670

#### **Texas**

**Acquisition and Restoration of Egerly Flats.** The Texas Parks and Wildlife Department will acquire approximately 924 acres of wetland and adjacent upland habitats along the Egerly Flats of Copano Bay. The project will provide feeding habitat for waterfowl and shorebirds, including brown pelicans and peregrine falcons, as well as provide nursery habitat for shrimp, blue crabs, red drum, spotted seatrout and flounder.

*Partners:* Texas Coastal Coordination Council and private landowners.

*Coastal grant request:* \$148,180

*Partner share:* \$426,250

*Total cost:* \$574,430



**Protection and Restoration of Starvation Cove.** Texas Parks and Wildlife, together with the Texas General Land Office, will acquire 100 acres, restore 10 acres of estuarine intertidal marsh, plant 1 acre of seagrass, and protect 451.7 acres by construction of a geotube breakwater in the Starvation Cove area of Galveston Bay. This project will protect and restore biological functions critical to the barrier island ecosystem, including shorebird nesting habitat.

*Partners:* Trust for Public Land, Reliant Energy, Galveston Bay Foundation, Galveston Bay Estuary Program, Spanish Grant Homeowner's Association, and the U.S. Fish and Wildlife Coastal Program.

*Coastal grant request:* \$954,000

*State share:* \$410,000

*Partner share:* \$216,500

*Total cost:* \$1,580,500

#### Virginia

**Game Farm Marsh Wetland Acquisition.** The Virginia Department of Game and Inland Fisheries will acquire 103 acres of forested wetlands and associated open water and emergent wetland habitat on the Chickahominy River, a tributary of the James River. The site includes undisturbed old growth timber and is in close proximity to the existing State Game Farm Marsh Wildlife Management Area. Purchase of this property will increase public access for hunting, fishing, wildlife viewing and boating.

*Partners:* The Wildlife Foundation of Virginia.

*Coastal grant request:* \$ 175,000

*State share:* \$ 215,000

*Partner share:* \$ 10,000

*Total cost:* \$ 400,000

**Protection of Crows Nest, Stafford County, Virginia.** Virginia Department of Conservation and Recreation will purchase 1,500 acres in Stafford County on the Crows Nest peninsula, which is bounded by Accokeek and Potomac Creeks. The Crows Nest peninsula is home to 2 nesting pairs of bald eagle. It is also home to one of the largest heron rookeries in the Chesapeake Bay watershed. This area will be protected in perpetuity as a State Natural Area Preserve.

*Partners:* Stafford County, The Nature Conservancy, the Conservation Fund, and the Trust for Crows Nest.

*Coastal grant request:* \$1,000,000

*State share:* \$5,000,000

*Partner share:* \$4,000,000

*Total cost:* \$10,000,000



#### Washington

**Deadman Slough Acquisition and Restoration Project.** The Washington Department of Fish and Wildlife, in cooperation with the Salmon Recovery Funding Board, will purchase 243 acres and restore 353 acres of estuarine marsh near the mouth of the Snohomish River. The project will provide nursery habitat for several species of salmon, as well as wintering habitat for migrating waterfowl and shorebirds.

*Partners:* The Cascade Land Conservancy, Ducks Unlimited, and the Pacific Coast Joint Venture.

*Coastal grant request:* \$1,000,000  
*State share:* \$ 400,000  
*Partner share:* \$ 373,000  
*Total cost:* \$1,773,000

**Dungeness Estuarine Wetlands Project.** The Washington Department of Fish and Wildlife, in cooperation with the Salmon Recovery Funding Board, will acquire and permanently conserve several coastal wetlands properties in the lower 1.5 miles of the Dungeness River and Meadowbrook Creek systems. Approximately 50 acres will be purchased with this project, which will provide habitat essential to several salmon species, migratory birds, shorebirds and also to the rare Taylors checkerspot butterfly.

*Partners:* Jamestown Sklallam Tribe, Clallam County, Ducks Unlimited, Dungeness National Wildlife Refuge Coordinated Volunteer Program, Puget Consumers Co-op, Dungeness River Center, Olympic Peninsula Audubon Society, and the North Olympic Land Trust.  
*Coastal grant request:* \$987,500  
*State share:* \$414,500  
*Partners share:* \$ 35,106  
*Total cost:* \$1,437,196



*Sandpipers*

**Lower Sequim Bay Estuary Acquisition and Restoration.** The Washington Department of Fish and Wildlife will acquire 8 acres of coastal wetlands and restore an additional 7 acres of wetland habitat, completing an ongoing restoration effort affecting about 156 acres of coastal wetlands. The project will benefit chinook and chum salmon, as well as migratory birds such as the greater yellowlegs, black oystercatcher, and rock sandpipers.

*Partners:* Clallam County, the Clallam County Conservation District, the Jamestown Sklallam Tribe, Clallam County Streamkeepers, Dungeness River Audubon Center, and the Olympic Peninsula Audubon Society.  
*Coastal grant request:* \$998,900  
*State share:* \$685,000  
*Partner share:* \$133,000  
*Total cost:* \$1,816,900

**Qwuloolt Project: Phase III Acquisition.** The Washington State Department of Ecology will acquire approximately 36 acres of wetlands within the Snohomish River delta. This acquisition will provide the final properties necessary to restore 390 acres of estuarine wetlands and access to a coastal stream currently blocked to salmon and other fish. The completed project will provide nursery habitat for chinook and other salmon species, and bull trout, as well as resting and feeding habitat for migratory waterfowl and shorebirds.

*Partners:* Natural Resource Damage Assessment Trustees, Pacific Coast Joint Venture, Tulalip Tribes, City of Marysville, and the Natural Resources Conservation Service.  
*Coastal grant request:* \$322,500  
*Partner share:* \$327,500  
*Total cost:* \$650,000



*Canada goose*

**South Padilla Bay Acquisition and Restoration.** The Washington Department of Fish and Wildlife, in cooperation with the Salmon Recovery Funding Board, will acquire and restore approximately 440 acres of estuarine wetlands along the south end of Padilla Bay, within the Puget Sound ecosystem of northwest Washington. The project will provide nursery habitat for several species of salmon, as well as provide foraging areas for migratory waterfowl and shorebirds during their annual migrations.

*Partners:* Skagit County, Ducks Unlimited, and the Pacific Coast Joint Venture.  
*Coastal grant request:* \$1,000,000  
*State share:* \$ 100,000  
*Partner share:* \$520,000  
*Total cost:* \$1,620,000

**Willapa/Cedar River Acquisition.** The Washington Department of Fish and Wildlife will purchase 475 acres of wetlands in the Cedar River Estuary and restore the habitat for wintering shorebirds. In addition to providing improved resting and feeding habitat for several species of waterfowl and shorebirds, the project will provide critical salmon rearing habitat, and protect two sites which are important for the reproductive success of band-tailed pigeons.

*Partners:* The Cascade Land Conservancy, the Wildlife Forever Foundation, and the Pacific Coast Joint Venture.  
*Coastal grant request:* \$860,000  
*State share:* \$ 5,000  
*Partner share:* \$395,000  
*Total cost:* \$1,260,000



*Salmon*



**Special Highlight  
Section of Region 1,  
Pacific Region**



## Sport Fish Restoration Program Funds New Fishing Pond Projects



Two years ago the Idaho Department of Fish and Game (Department) initiated an urban fishing pond development program to provide a diversity of fishing opportunities and enhance youth fishing. Through the Sport Fish Restoration program and with the assistance of many partners: U.S. Forest Service, Bureau of Land Management, National Forest Foundation, Idaho County and City governments, local Soil and Water Conservation Districts, mining and timber companies and many others, the Department constructed or purchased 13 fishing sites throughout the State.

Most of these sites are urban fishing ponds, less than 5 acres, and are close to major population centers. These “bicycle fisheries” were primarily developed to promote fishing opportunities for young people but also have accommodations for persons with disabilities as well as our elderly fishermen. Toilets, parking and picnic areas, boat ramps and handicap access facilities are provided on most of these areas. The Department keeps these waters stocked with

hatchery fish and our return to creel is very high in most ponds. Most of these waters are also part of our “Family Fishing Waters” program. This program provides for urban fisheries that promote sport fishing by having only general fishing regulations associated with them. That is, there are no bait, size or gear restrictions, just a daily bag limit making it very simple for the anglers.

Twelve of the thirteen waters developed from the Sport Fish Restoration program cost approximately \$550,000 and were fairly small projects. Our “showcase” fishery that was developed under this program was the construction of the 65 acre Deer Creek Reservoir, which was just recently completed at a cost of \$1,000,000. This reservoir will be dedicated this spring and is the only major fishing reservoir constructed in State in many years.

Bill Hutchinson,  
Assistant Chief of Fisheries  
208/334 3791  
bhutchinson@idfg.state.id.us

## Idaho's FY02 State Wildlife Grants (SWG) Program



### Nongame Wildlife Conservation:

The Idaho Department of Fish and Game (IDFG) has established Regional Nongame Biologists throughout Idaho. These biologists will be able to focus on species with the greatest conservation need, and focus on the specific concerns with in the regions. Through surveys and inventories, these biologists will assess the status of nongame species, and evaluate and prioritize the conservation needs for each region. SWG Third Party Grants Program: Approximately 1/3 of Idaho's allocated SWG funds have been set aside to allow IDFG to fund projects that are proposed by educational institutions, conservation organizations, private individuals, non-government organizations, local, and state agencies.

We are seeking to fund projects that will make positive contributions to the conservation needs of native fish and wildlife species in Idaho, especially

those that are not hunted or fished. These dollars are geared to specifically address conservation projects.

**Bats and Mines:** Selkirk Conservation Alliance. Bat surveys are being conducted at 30 mines to determine which species of bats are roosting in them. These include open and gated mines where Townsend's big-eared bats have been found. Big-eared bats are endangered in the east and Midwest and face similar threats in the west. This project will also examine the effects of gating mines on bat use.

**A Survey for Yellow Billed Cuckoo in Recorded Historical and Other Likely Locations in Idaho:** Trec, Inc. Since 1895, there have been less than 40 documented records of yellow-billed cuckoo (a candidate species) in Idaho. This project will update the list of records, determine the presence of this



species, survey the cottonwood riparian forest in the Upper Snake River Basin, and enlist the cooperation of the Idaho birding community to examine other likely locations of this species

**Crooked Creek Ranch Conservation Project: North American Grouse Partnership of Idaho.** Crooked Creek Ranch provides an opportunity to maintain and enhance prime greater sage grouse habitats in Idaho and to establish it as a leading regional and range-wide example of sagebrush steppe ecosystem conservation, based on the use of sage grouse as an umbrella species. This model will demonstrate how to plan, implement, and evaluate effective landscape level ecosystem management in sage grouse habitat where multiple land uses and ownerships exist.

**Greater Yellowstone Wolverine Program: Wildlife Conservation Society.** Agencies charged with the sustainable management of wolverine populations on multiple use lands are currently wrestling with issues such as the impacts of winter recreation on wolverine reproduction, habitat management, sustainable trapping quotas, and methodology for assessing population status and trends. In all cases, the paucity of information regarding wolverine demographics and ecology limits the ability of managers to make well-informed, defensible decisions that can advance conservation of this species. The primary goal of this study is to provide managers with the information necessary to make such decisions

**Population Structure in Fragmented Landscapes: Spotted Frogs and Collared Lizards:** Boise State University. The long-term viability of a fragmented population depends largely on dispersal among subpopulations. Genetic markers will be used to assess movement among subpopulations in two species, Columbia spotted frogs

(candidate species) and Mojave black-collared lizards (sensitive species).

**Addressing Abundance and Genetic Diversity in *Dicamptodon aterrimus*:** Idaho State University. This project will characterize the genetic diversity and population size of the Idaho giant salamander, *Dicamptodon aterrimus*. Previous surveys and research have found the population of the Idaho giant salamander to be far smaller than expected. In addition, the genetic diversity within subpopulations was also very small.

**Preliminary Investigation of Reproduction Pygmy Rabbits:** Idaho State University. Radio-collared pygmy rabbits (species of special concern) will be monitored during the spring and summer to gather information on reproduction to fill critical gaps in knowledge about this species. This work builds on current fieldwork and will provide preliminary data for a comprehensive survey of population status and distribution of pygmy rabbits in Idaho.

**Southeast Idaho Pinyon/ Juniper Bird Surveys: Red Willow Research.** This project will involve riparian point counts for breeding birds in pinyon-juniper habitat for selected locations in southeastern Idaho. Birds in this ecosystem are suffering from habitat fragmentation, and the status of bird populations should be ascertained.

**Inventory of SE Idaho Bat Sites: Use of Natural Roost Sites & Man-made Analogs: Red Willow Research.** This project will identify and evaluate natural or analogous (mine, other) sites used by bats in southeast Idaho for hibernacula, maternity, and/or transient roosting needs. The project will identify the season, type, and biological significance of site use and address threats or management concerns.





*Trumpeter swans*

**Statewide Survey for Mountain Quail: Idaho Bird Observatory, Boise State University.** A statewide survey in Idaho for mountain quail (species of special concern) will be conducted. This information will provide baseline data on the current distribution and status of mountain quail and will help guide future work on this species in the state.

**Dispersal and Translocation of Southern Idaho Ground Squirrels: Boise State University.** The propensity of the southern Idaho ground squirrel (a candidate species) to disperse will be determined, such that we can understand the likelihood that the colonization of new areas and population expansion can occur. The factors that affect the success of translocation efforts will also be studied.

**Bank Erosion Restoration Project Proposal Trout Creek, Kootenai River Basin: Kootenai Tribe.** The lower floodplain portion of Trout Creek (approximately 2 km) is part of a larger scale lower Kootenai River ecosystem rehabilitation project. Along Trout Creek there are two severely degraded and eroding meander curves. Installation of woody material matrices and living vegetation along these meander curves will restore and protect the stream channel and riparian areas by reducing shear stress and erosion.

**Occupancy, Productivity, and Banding of Northern Goshawks: Idaho Bird Observatory, Boise State University.** This is a continuation of standardized surveys of known northern goshawk breeding territories within the Sawtooth National Forest to determine occupancy and estimate productivity, and to band breeding adults and young to study nest-site fidelity, turnover rate, territory dynamics, dispersal, and long-term population dynamics. This project will also firmly establish a protocol for nest searching and banding within the Sawtooth National Forest so that yearly monitoring results can be directly

compared and long-term population trends can be analyzed.

**Survey of Breeding and Wintering Habitat for Trumpeter Swans along the Bear River, Idaho:**

**University of Idaho** The goal of this project is to conduct a survey to assess the quality of habitat for breeding and wintering trumpeter swan in the Bear River area of Idaho.

**Southern Idaho Ground Squirrel Captive Breeding Center: Friends of Zoo Boise** Zoo Boise will build an addition to the Southern Idaho Ground Squirrel Captive Breeding Center in order to allow enough space to introduce additional squirrels, and to enable researchers to carry out research on the squirrels. This program will be used as a template to design a similar program for the Northern Idaho ground squirrel, which is currently listed as Federally Threatened.

**Using the Western Rattlesnake (*Crotalus viridis*) as an Umbrella Species, to Develop Ecosystem Management Recommendations that will Benefit Reptiles of the Upper Snake River Plain: Idaho State University.** This project will describe and quantify the effect of landscape characteristics on western rattlesnakes in southeastern Idaho. The results should have ecosystem management implications that will influence many reptile species in the Upper Snake River Plain.

**A Study of the Northern Bog Lemming and Its Habitats in Idaho: The Environmental Trust.** The northern bog lemming (*Synaptomys borealis*) is a Species of Concern for the state of Idaho and Sensitive for the U.S. Forest Service. This project will survey and characterize sites previously studied for presence/absence of lemmings and other sensitive resources as well as new locations.





*Pygmy rabbit*

**Sam Noble Springs Conservation Lease: Idaho Department of Fish and Game.** A 25 year lease was purchased from the Idaho Department of Lands to protect 101 acres of a wetland complex for Columbia spotted frogs. An enclosure was created, fencing out grazing cows, while a new water diversion system will be created which will allow the cattle access to water without disturbing the frog habitat.

**Thinking Big and Small: Population Dynamics of Pygmy Rabbits at Multiple Scales: University of Idaho.** This project investigates factors that influence dynamics within populations of

pygmy rabbits, and also connections among populations at local, regional, and statewide scales. Demographic and genetic information will be combined to provide a better understanding of impact of habitat fragmentation in this species.

**Distribution, Biology, and Home Range of the Pygmy Rabbit in SW Idaho. Boise State University** The objectives of this study of the Pygmy rabbit (species of concern) are to better understand the distribution, the basic biology, the dispersal patterns, and the home range of this animal.



### **Wildlife Restoration Programs Aids in Population Monitoring and Assessment of Status of Flying Foxes and Native Birds**

Flying foxes and native birds are closely tied to the Samoan culture, as indigenous food items, sources of cultural artifacts and ornaments, and spiritual embodiments of ancestral icons. Monitoring and assessment of the status of populations of these species is vital for management under regimes of unpredictable catastrophic events such as hurricanes and potentially escalating anthropogenic pressures. Successive hurricanes in 1990 and 1991 decimated many of the populations to critical levels. A total hunting ban, instituted in 1992 specifically to aid in the recovery of flying fox and pigeon populations, received and continues to receive widespread support effected through consultations with traditional leaders

(chiefs, village councils, and pulenu'us). In 2002, an experimental (controlled) hunt of *Ducula pacifica* (Pacific pigeon or lupe) was held in time for White Sunday, a local observance celebrating children and traditionally a time when lupe were hunted using the *tia seu lupe* (lupe hunting mound). The long-term data from the WR-supported monitoring program was a pre-requisite of such a management activity: these not only showed a stabilizing population but provided a biological basis for the timing of the hunt. The population response to the controlled hunt is being monitored and will indicate whether and to what extent regulated hunting may resume.

### **Wildlife Diseases: Screening for Blood Parasites, Viruses, and their Potential Vectors Through Collaborative Research**



*Bat*

Nowhere can diseases have more devastating consequences on native wildlife than on small, isolated islands. Arriving at a clear understanding of disease processes that may impact the native fauna of the small islands of American Samoa was deemed critical for the conservation and management responsibilities of DWMR. In 2001, an WR-funded program was instituted for opportunistic screening for blood-borne diseases in birds and fruit bats — including testing for hematozoan parasites in birds and bats, for Nipah/Hendra-like viruses in bats, and identification of their potential vectors. Initial results revealed the occurrence of *Plasmodium* spp., trypanosomes, and filaria in birds, and possibly *Hepatocestis* in the fruit bats. Many of these disease agents have not been previously recorded from birds and bats in this region. The results of such a comprehensive screening will help us to understand patterns of occurrence, spread, and disease resistance or

susceptibility in wildlife hosts not only in the Territory but throughout the western Pacific region. The accomplishment of this goal is greatly enhanced by collaboration with various agencies and scientists, allowing us to pool complementary resources to effect a comprehensive analysis of questions of interest and importance. Especially valuable partners in this program are USGS-BRD/Hawaii (C. Atkinson and D. La Pointe), CDC-Special Pathogens Branch (T. Ksiazek), and Ohio State University Acarology Laboratory (H. Klompen), with cooperation from ASCC/Land Grant (M. Schmaedick and F. Brooks) and University of the South Pacific, Fiji (M. Tuiwawa, C. Morley, and A. Naikatini).

For more information, contact:  
Ruth C.B. Utzurrum, Ph.D  
Wildlife Biologist  
ASG-DMWR  
dmwr-wildlife@samoatelco.com

**Wildlife Restoration Programs Try to Maintain Endemic Species**



*White-throated ground dove*



*Collared kingfisher*

The Commonwealth of the Northern Mariana Islands is composed of an archipelago of 14 small islands spanning several hundred miles. Many of the islands north of Saipan are still geologically active. The islands of Saipan, Tinian, and Rota are the human population centers, with Saipan being the capital. Being small islands, far from continents there are few bird species, only 17, of which 6 are endangered. The scattered distribution of native wildlife species and the threat of invasive species are two major research and management challenges. The greatest biological concern presently is the threat of a Brown Treesnake introduction from neighboring Guam. The Division's wildlife management program focuses on basic biological research that is used to determine management practices. Division biologists conduct regular surveys to track relative abundance of native species. We also design and manage several research projects that focus on specific endangered species. Additionally, there has been focused control on invasive species in the past 8 years. Some of this work is described below.

**Sarigan Feral Animal Eradication**

Sarigan is approximately 500 ha and located 121 miles north of Saipan. Sarigan is home to the Mariana fruit bat and 5 native forest bird species: the endangered Micronesian Megapode, Collared kingfisher, Micronesian Starling, Micronesian honeyeater, and the White-throated ground dove. The island had been suffering from severe ecological decline due to the presence of feral goats and pigs. In 1995, a reconnaissance trip through the Northern Islands was made to identify islands that would be potential candidates to evacuate native bird species to, in the event the Brown

Treesnake becomes established on the main islands of the Commonwealth. Severe feral animal damage was found on many of the non-human populated northern islands. It is estimated based on historical records that the animals had been feral on Sarigan somewhere between 50-100 years. The island was nearly devoid of all but the most unpalatable vegetation, forest had become patched and there was no tree recruitment.

Feral animal control began in February 1997. Immediately prior baseline bird surveys were conducted. Vegetation monitoring plots were also established. A total of 904 goats and 68 pigs were eradicated from the island by March 1, 1998. The following September a follow up team found one remaining goat. The vegetation had increased dramatically in just 6 months. Vegetation monitoring plots had two times the number of herbaceous species as prior to feral animal removal. Ground cover was also increased approximately two-fold. The complete results of the vegetation surveys for 2 years after feral animal removal were presented at the Society for Conservation Biology Annual Meeting in 2002.

The population of Micronesian megapodes, White-throated ground doves and Mariana fruit bats have responded quickly and favorably to the eradication efforts. The Division is working towards getting formal conservation protection for the island. If Brown Treesnakes become established on Saipan, Tinian, or Rota, evacuating birds to the islands north will probably occur. It is anticipated that a full post eradication removal biological survey will occur in the next 5 years.

**Checklist of the Fishes of the Commonwealth of the Northern Mariana Islands (CNMI)**

The CNMI, including 14 islands and more than 29 named offshore reefs, is located about 150 miles N of Guam in Micronesia. Fishes are very important resources for the people of the islands. Although biologists and local fishers are well acquainted with food fishes and the larger, more colorful local coral reef fishes, many of the fishes found in deep waters below 200 ft, reef fishes found in the waters of the more remote and unpopulated islands, and small reef fishes that are cryptically colored or hide in the many reef crevices are poorly known. Indeed, biologists are uncertain what fishes may live in these areas, even near some of the more populated islands.

This year, CNMI Division of Fish and Wildlife biologists were able to greatly increase the knowledge of the fishes found in the CNMI through three efforts: (1) targeted use of an ichthyocide at 14 locations around the island of Saipan (with the assistance of biologists from South Africa and Kansas), (2) participation in the NOAA Marianas Archipelago Research and Mapping Cruise that visited all 14 islands and 6 offshore reefs, and (3) though underwater photography around the island of Saipan.

In total, more than 2300 records were added to the checklist this year through US FWS DJ Sportfish Restoration funding to the CNMI Division of Fish and Wildlife (\$26,480). These records

include new locality records of fish (e.g., a new record for black jack, *Caranx lugubris*, at Supply Reef), records of fish that have never been documented for the CNMI (or nearby Guam) before (e.g., blunthead puffer, *Sphoeroides pachygaster*, in deep water off the island of Saipan), and at least 8 records of fish that have not yet been formally described by biologists anywhere in the world before (e.g., *Helcogramma sp. 1*, a type of triplefin, and *Dinematichthys sp. 1*, a type of brotula).

There are a number of benefits in developing a more accurate picture of the distributions and kinds of fishes in the CNMI. First, this allows fisheries biologists to make more informed assessments and judgments with regard to the management of local fisheries. Second, it is becoming increasingly clear that small coral reef fishes may be very diverse and exceedingly abundant—serving as critical early links in the food webs of coral reefs. As we learn more about the presence, distribution, and abundance of these fishes, we hope to understand more of the critical functions that maintain coral reef diversity and productivity. Third, it contributes to our knowledge of the worldwide distribution of fishes in the western Pacific—a region that is currently of interest because of the very high diversity of fishes and the growing reliance on and importance of coral reef resources.



*Dinematichthys sp.*



*Helcogramma sp.*

**Wildlife Resoration Program Aids Anatahan Feral Animal Control**



*Mariana fruit bat*

Anatahan was found to also suffer from severe ecological damage in 1995. In the year 2000 previously forested areas were destroyed. A feral animal control project was then initiated on Anatahan because of the rapid ecological decline in only a five year period. Anatahan is approximately 3,230 ha, the largest of the islands north of Saipan. The island has very steep terrain and two craters at the peak. The smaller crater erupted in May 2002. Anatahan has the Mariana fruit bat and four native forest birds: the Micronesian honeyeater, the endangered Micronesian Megapode, Micronesian Starling, and the White-throated ground dove. There are two resident seabirds: the Brown noddy and the White tern.

Additionally, there is a resident Buteo species, which is being investigated further.

Initially, feral animal control verses eradication was initiated largely because of political-social opposition to complete removal. Anatahan has had a small village that has been inhabited for many years. The village inhabitants view the feral animals as a necessary food source and enjoy having the hunting opportunity. The village has not had more than 20 inhabitants per year however; since the early 1980's. Consequently, control of animals has been low and sporadic.

## Creel Surveys Critical to Guam Efforts



For Pacific Island cultures, fishing is not a hobby or recreational pastime. It is a means of sustenance. That's not to say that islanders do not enjoy the act of fishing, it simply means that everything is taken for food and nothing is wasted. In the past, indigenous peoples, such as the Chamorros on Guam, managed important resources under a traditional tenure system, where certain groups of people were banned from utilizing specific resources or resources were protected during specific times of the year. Unfortunately, many traditions have been lost during the past 500 years of colonization.

Currently, Guam is a territory of the United States, a designation that comes with both benefits and disadvantages. The equal rights shared by everyone under a democratic system, including equal access to shared resources such as fish, often results in a "tragedy of the commons", with everyone harvesting their perceived share before it is taken by their neighbor. The indiscriminate harvest of resources was exacerbated by the economic boom and associated population increase of the 1980's. Guam is now home to many different ethnic groups, all harvesting a variety of the rich resources provided by our coral reefs in many different ways. Many people living on Guam today do not feel a strong connection to the resources surrounding them, either because of the transient circumstances under which they live, such as those seeking employment here, or because their taste for reef fish has been supplanted by a taste for fast food.

The Division of Aquatic & Wildlife Resources (DAWR) has been conducting creel and participation surveys for coastal fisheries, using Sport Fish Restoration (SFR) grants (approximately \$80,000 per year), since 1982. From 1985 to 1998, harvest and participation data indicated a 70% decline in catch per unit effort (CPUE) for all methods of fishing combined. A shift toward less desirable species was

also seen. Based upon the need to restore reef fish stocks in the coastal areas of Guam, changes were made to the fishing regulations and five marine preserves were established under Public Law 24-21.

With the establishment of the five marine preserves, 11.5 % of Guam's total coastline is now protected. The goal of the preserves is to provide an opportunity for the coral reef fishery resources to recover in numbers and diversity, serving as "egg banks" for adjacent areas, ensuring a sustainable harvest for future generations. In 1999, DAWR began a project to assess the effectiveness of the marine preserves funded by SFR. Baseline data on fish densities, size classes, and species composition were collected using permanently marked belt transects and timed swim counts. Surveys were repeated after 2 years. Preliminary data show that fish densities, sizes, and the number of species have increased significantly within preserves after full implementation of enforcement efforts. Ongoing surveys are funded by both SFR (approximately \$100,000 total) and Coral Reef Initiative (CRI) monitoring grants (approximately \$125,000 total). In addition, Dr. Mark Tupper at the University of Guam Marine Laboratory is currently conducting 2 separate mark-recapture studies to assess if there is a spillover effect from migration by adult reef fish and/or larval recruitment from the marine preserves into adjacent areas (both CRI grants total \$85,000).

To assist in ensuring the effectiveness of the preserves, DAWR has partnered with other local agencies to implement many public outreach efforts. Funds from a combination of SFR, CRI, U.S. Forest Service, Environmental Protection Agency Section 319, and Coastal Zone Management grants, have been used to produce posters, flyers, banners, hotel tent cards, and an in-flight video, all providing information about the marine preserves. DAWR has

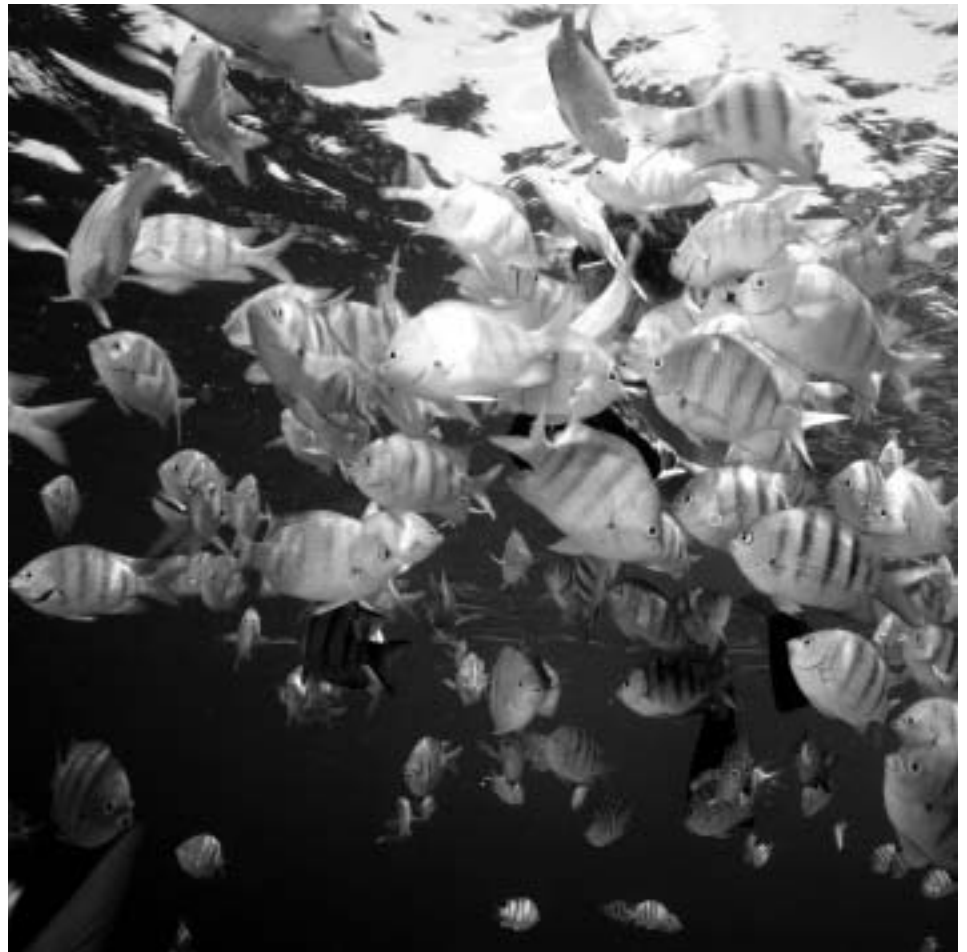




also conducted numerous presentations at schools, village community centers and the Legislature.

When the marine preserves were first implemented, there was much opposition to them. However, many fishermen have become vocal supporters, including the President of the Guam Fishermen's Co-op, after seeing the larger numbers and sizes of fish building up within the preserves.

Now, fishermen have begun to concentrate effort on the borders of the preserves as well. Although it's too soon to gauge the full measure of their success at restoring Guam's coral reef fish stocks, our marine preserves have certainly given local children a glimpse of the way things may have been when their parents and grandparents were young.



## State Wildlife Grants Help Hawaii's Endemic Species



### State Wildlife Grant Project Examples

Nearly half of Hawaii's endemic bird species are endangered, posing significant challenges to management agencies charged with their protection and recovery. Our integrated approach emphasizes basic research to understand the biology of particular species, mitigation and control of threats and limiting factors, ecosystem restoration and protection of suitable managed habitat, education and outreach, and captive propagation and reintroduction programs. Below are select examples of projects that have contributed to these efforts through State Wildlife Grants.

#### Akiapolaau Population Research and Management

The endemic Akiapolaau is among the world's most unusual bird species, with an asymmetrical bill adapted to fill a woodpecker niche in native Hawaiian dry and mesic forests. It is currently endangered with an estimated population numbering perhaps 1100 individuals. Lack of information on the basic habitat needs of this species has hindered recovery efforts aimed at protecting and reestablishing populations. Akiapolaau have long been thought to be dependent on old growth forests, a resource that has declined precipitously in historic times. We began an intensive investigation of habitat use in this species in order to understand the significance of forest age, composition, and structure on population density and demography.

Preliminary results have yielded surprising findings, indicating a far broader use of habitat than previously thought, including extensive use of koa, a prized Hawaiian hardwood. These findings bode well for Akiapolaau recovery, and point the way for habitat restoration and reestablishment into restored habitats.

#### Maui Forest Bird Recovery Project

Among remaining Hawaiian forest bird communities, one of the most intact is found on the remote windward slopes of Haleakala, Maui. Among the five endangered songbirds of this area are the world's rarest bird, the pouli, and the charismatic Maui parrotbill (shown at right). As with many Hawaiian bird species, these species are currently threatened by habitat degradation and introduced predators, competitors, and diseases, the impacts of which appear to vary enormously in time and space. The Maui Forest Bird Recovery Project supports a full-time field crew dedicated to research and management of these unique species in the heart of the rugged rain forests of Maui. The crew is tasked with control of predators and invasive weeds and ungulates, and maintains a 1200-acre fenced enclosure that supports the only known remaining pouli. This work provides essential protection for these species, and carries out key research to guide management policy through collaboration with government and private workers. Presently we are completing an intensive evaluation of methods for the control of devastating predators that promises to lead to more cost effective control over broader areas.

### Agency Partnerships Target Boating Access with SFR Funds



The Lake Tahoe Fishing Pier and Boat Launching Facility project was developed in cooperation with the Tahoe City Public Utilities District to renovate the Lake Tahoe Fishing Pier and Boat Launching Facility. The project is located one mile East of Tahoe City in Placer County, California. The Wildlife Conservation Board submitted an application to U. S. Fish and Wildlife Service in September of 1993. At that time construction was envisioned to be a straight forward fishing access project to improve an existing boating facility. It eventually became clear that construction of waterside work on Lake Tahoe is much more complicated than other areas due to environmental constraints and concerns. Years of negotiations with permitting agencies resulted in a project considerably different from that originally designed, and changes in design resulted in increased costs for environmental protection. The original concept called for a project that would lengthen and widen the existing ramp, provide wave attenuation, reconfigure the pier, install a boarding float and make improvements to the parking area. It soon became clear that some portions of the proposed project would result in unacceptable impacts to Lake Tahoe's ecosystem, most notably the expansion of the boat ramp, so those portions of the project were withdrawn. The new development included that the pier and wave attenuation structure be modified

to include both sheet piling and rock cribbing to eliminate potential impacts to critical fish spawning habitats. Revised, more detailed engineering plans clearly defined the project and allowed for more exact cost estimates, which were higher than originally estimated. After numerous time extensions and cost increases to the original grant agreement were approved, the project was successfully completed in June 2003.

Lake Tahoe can be very windy due to the location high in the mountains. The design of the pier and attenuation structure provides a wind block for adventurous boaters and anglers on windy days. Also included in this project were the reconstruction of the parking lot, a new kiosk, the addition of new lighting, landscaping and signage. The final project cost totaled \$1,702,041 in which the Fish and Wildlife Service reimbursed the state for \$1,276,530 (Sport Fish Restoration Program). When viewing the new boat launching facility at Lake Tahoe, it is very easy to say that ten years of hard work were well worth the wait. This project turned out beautifully thanks to all parties involved and provides a very nice boat launching facility to a bustling tourist community in Lake Tahoe.

Jenny Smith, Grant Coordinator  
Wildlife Conservation Board

### Wildlife Restoration Program Benefits California Land Planning

The Department of Fish and Game has expended tremendous effort toward land management planning within the last several years even during past and present budget challenges. The federally funded, statewide Management Plan Coordinator has revised the Department's Guidelines and has assisted the Regions in completing land management plans based on priority, with outside contracts using a variety of funding sources. Currently, the Department is requesting California Clean Water, Clean Air, Safe

Neighborhood Parks and Coastal Protection Act (Proposition 40) funds from the Wildlife Conservation Board to continue these efforts, while new acquisitions are added to the Department holdings which are mandated to have management plans by recent legislation. Additionally, annual work plans and site monitoring evaluations are completed for many DFG lands which specify current management actions based on best available science.



(The Federal share for the project is about \$93,613 from the Wildlife Restoration Program.)

The Department manages 681 properties totaling 969,991 acres including wildlife areas, ecological reserves, public access, fish hatcheries and miscellaneous lands that include conservation easements and lands that are not designated. It is the Department's policy to have land management plans for designated lands which serve the following purposes:

*"..to guide management of habitats, species, and programs described herein to achieve the department's mission to protect and enhance wildlife values; serve as a guide for appropriate public uses of the property; serve as a descriptive inventory of fish, wildlife and native plant habitats which occur on or use this property; provide an overview of the property's operation and maintenance, and personnel requirements to implement management goals; serve as a budget planning aid for annual regional budget preparation; and finally provide a description of potential and actual environmental impacts and subsequent*

*mitigation which may occur during management, and contains environmental documentation to comply with state and federal statutes and regulations."*

One of the Department's initial undertakings, the Sacramento River Wildlife Area Comprehensive Management Plan is in the final stages of completion. The plan was funded in part with \$75,000 Wildlife Conservation Restoration Program monies and was coordinated with the USFWS and the California Department of Parks and Recreation which are in the process of drafting management plans for their properties within the Sacramento River zone.

Since the year 2000-01, thirty-five plans are in draft form with eighty-four plans projected to be completed by the state's fiscal year 2005-06. It is an ambitious undertaking, but land management planning is a crucial step in the land stewardship process, conservation of habitats and fulfilling the Department's trustee responsibility for California's wildlife.

Teresa LeBlanc

## Declining Pheasant Populations Studied with Wildlife Restoration Funds



*Photo Credit: Chet Hart*



*Photo Credit: Chet Hart*

California's ringneck pheasant populations have experienced considerable decline over the past 30 years. In many cases, such declines, and even local extirpations, are directly linked to the employment of clean and intensive farming practices. However, over the last 10 to 15 years, state biologists believe they learned much about the key elements required to manage these desirable birds under California's unique climate and agricultural conditions. In 2000, it was time to put this newfound knowledge and an associated management concept to the test.

Federal Wildlife Restoration dollars, paired with California Upland Game Stamp monies, funded a three-year of study on Grizzly Island Wildlife Area, located in the Suisun Marsh of California's Delta Region. The experimental concept consisted primarily of developing and managing essential habitat elements on fairly small plots not being actively farmed. These areas were descriptively termed Diversified Upland Habitat Units (DUHU). The method was simple, consisting essentially of disking a small percentage of the DUHU in narrow strips in the fall, and later applying water to part of the strips. No planting was prescribed, just working with existing native or naturalized plants.

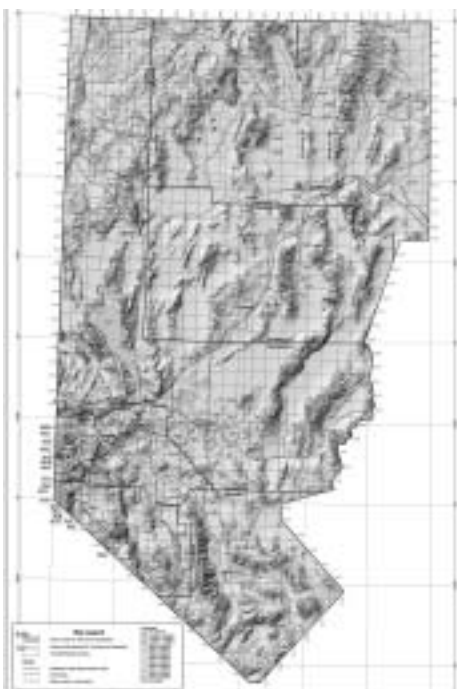
To evaluate the concept's effectiveness, the productive quality of the managed DUHU was compared with similar but essentially unmanaged areas in the same general location. The results of this study have been dramatic and decisive. After three breeding seasons, the population density of pheasants in

the DUHU was the highest recorded to date by the California Department of Fish and Game (CDFG) — an average of two pheasants per acre. In stark contrast to the DUHU results, there was no evidence of the local population increasing in the Comparison Area. The main factor contributing to high DUHU pheasant numbers was excellent survival of chicks, attributed directly to the part of the management method that provided good and readily available food supplies for young pheasants (arthropods). Additionally, studies overseen by Bob Allen, a CDFG wildlife biologist in the San Joaquin Valley, have shown that there was greater diversity of avian species, including grassland songbirds, as well as numbers of non-game bird territories, in DUHU-managed areas during the spring nesting season.

It is evident now that surprisingly large numbers of pheasants and other wildlife can be produced from carefully planned and executed management on suitable, relatively small areas. This opens new horizons for more productive upland management on State and Federal wildlife areas and a wide variety of private lands similarly dedicated to wildlife and related recreation. In 2003-2004, approximately 25 new areas are preparing to give the method a try. These will include varying conditions from semi-desert in the southern San Joaquin Valley to the more severe winters of the Klamath Basin at the Oregon border.

Pat Lauridson & Chet Hart  
California Department of Fish and Wildlife

**Sport Fish Restoration and Clean Vessel Act Funds Improve Services for Nevada Recreationists**



**Angler Maps**

The Nevada Department of Wildlife generated three user friendly, easily readable angler maps covering the entire State of Nevada. Over 650 major waters are represented including lakes, reservoirs, rivers and streams. The maps were completed by a private GIS company after being furnished the water names and locations as well as fish species present. A total of 45,000 maps were printed, 15,000 for each of the three regions in the state and are available free to the public.

**Fisheries Management Grant:**

State share: \$10,884  
 Federal State share: \$32,653  
 Total cost: \$43,537

**Floating Restrooms**

The Nevada Department of Wildlife wrote grants for the National Park Service to install two floating restrooms and purchase a pumpout barge for Lake Mead. Sewage concerns generated by approximately 250,000 boaters annually led to the project. The first floating restrooms appeared upstream on Lake Powell in the 1990s and have since proven highly successful. Each restroom holds 4,500 gallons of sewage and not only offers restroom facilities, but also serves as dump stations for porta-potties, which may be a boating requirement in the near future. A total of 7 floating restrooms are scheduled to be built and placed strategically around the lake over the next several years.

**Boating Access Grant and CVA Grant:**

Barge: \$250,000  
 Restrooms: \$150,000 each  
 State share: \$300,000  
 Federal share: \$250,000  
 Total cost: \$550,000

**Solar Fish Cleaning Station**

The Nevada Department of Wildlife wrote grants for Nevada State Parks to install a solar fish cleaning station at Cave Lake, a 32-surface acre recreational trout fishery near Ely, Nevada. The cleaning station is the first

of its kind in the United States according to Steve Weaver, State Parks State Planner. The project has already been a big hit with the anglers.

**Boating Access Grant:**

State Wildlife share: \$7,500  
 Federal share: \$22,500 (equipment),  
 State Parks share (engineering and construction): \$10,000  
 Total cost: \$40,000

**Angler Education**

The Nevada Department of Wildlife employees two fishing instructors, one in the northern section of the state and one in the southern. Clinics include instructions on warmwater and coldwater angling techniques with specialty classes for kids and fly fishermen.

In addition to the game fish clinics, Nevada has been promoting the harvest of less desirable nongame nonnative fish species such as the lowly carp, the bonefish of the desert. Prior to a clinic, the area is baited with cracked corn boiled in Kool-Aid, which brings the fish in in droves.

**Conservation Education Grant:**

State share: \$10,125  
 Federal share: \$30,375  
 Total cost: \$40,500, not including 300 hours of volunteer time.

**Fisheries Habitat Improvement**

The Nevada Department of Wildlife installed 100 Christmas tree brush shelters in a local urban fishery: Sparks Marina Park Pond in Sparks, Nevada. Three trees were wired together and to a cinder block, which was then dropped off a barge at predesignated locations around the pond to provide habitat for young bass.

Partners: City of Sparks Parks Department, Basalit Company, Churchill County Parks and Recreation Department, Nevada Department of Wildlife Volunteer Program.



**Fisheries Management Grant:**  
 State share (manpower & equipment): \$ 300  
 Federal share: \$ 900  
 Volunteers: 120 hours of volunteer time  
 Total cost: \$1,200

**Warmwater Fish Program**

The Nevada Department of Wildlife routinely purchases warmwater fish for reservoirs that lack adequate spawning habitat or where sterile species are desired. Commonly purchased species include walleye, wipers (striped bass x white bass hybrid) and channel catfish. The enclosed picture of a 16-pound 2-ounce wiper from Lahontan Reservoir is testimony to the success of the program.

Partners: OK Tires (Winnemucca) collected private donations, and Barrett Mine (Elko).  
**Fisheries Management Grant:**  
 State share: \$6,896  
 Federal share: \$20,687  
 Total cost: \$27,583



**Clark County Urban Fisheries Program**

The Nevada Department of Wildlife manages three urban fishing ponds in Las Vegas: Sunset Park Pond, Floyd Lamb State Park and Lorenzi Park Pond and one in Boulder City (Boulder City Urban Pond). Due to elevated summer water temperatures, channel catfish are stocked between April and October and rainbow trout are stocked from November through March. The program has proved to be quite popular, generating 34,088 angler days in 2002.

Partners: Clark County Parks and Recreation Department, Nevada State Parks, City of Las Vegas Parks and Recreation Department and Boulder City.



**Trout Production Grant and Fisheries Management Grant:**  
 State share: \$21,725  
 Federal share: \$65,044

**Liberty Pond**

The Nevada Department of Wildlife cooperated in the construction of an urban fish pond, Liberty Pond, in the desert town of Fallon Nevada. The 1.2 acre 7-foot deep pond was built by the Fallon Naval Air Station Seabee Unit CB 416. A local Boy Scout troop placed fish habitat in the pond. A large wooden ADA pier with a fishing well dissects the pond. The pond is also equipped with an aeration system.

Partners: Fallon Naval Air Station Seabees, local Boy Scout Troop and Churchill County Parks and Recreation Department.

**Fisheries Management Grant:** State share: \$1,500 Federal share: \$4,500  
 County share: \$14,587 (material) Seabees and Churchill County Parks and Recreation (labor): \$89,723  
 Labor \$100,000 (Fallon Naval Air Station Seabees and Boy Scouts)  
 Total cost: \$110,310

**Angler Information Centers**

The Nevada Department of Wildlife has installed 12 Angler Information Centers throughout its Western Region at popular fishing areas. The centers offer a wealth of information including the history of the fishery, types of fish present and a synopsis of angler use. Angler survey/questionnaire forms are also provided. The right side of the Kiosks are set aside for individuals to post notes and messages.

Partners: Nevada Division of Forestry's Rose Creek Honor Camp (donated labor)

**Sport Fish Grant:**  
 State share: \$625  
 Federal share: \$1,875  
 Total cost: \$2,500

**Verdi Nature Center**

Located at the transition zone between the Sierra Nevada Mountains and the Great Basin Desert lies the newly opened Verdi Community Library and



**Wildlife Education Center:** The 8-acre nature center highlights the uniqueness of transitional wildlife habitat between the mountains and the desert. Outdoor activities include plant and animal identification, track identification, mapping activities and geological studies on the Verdi Nature Trail. Indoor activities feature literacy correlation to nature, art/drawing activities and aquatic ecosystem activities at the native fish tank.

**Partners:** Washoe County Public Library, Washoe County School district and the Verdi Community.

**Sport Fish Grant:**  
 State share: \$50,000  
 Federal share: \$150,000  
 Washoe County School District share: \$180,000  
 Washoe County Public Library share: \$180,000  
 Private donations: \$140,000  
 Total cost: \$700,000

\$10,000  
 Total cost: \$28,116

**Hatchery Refurbishment Project**

The Nevada Department of Wildlife has undertaken a substantial rebuilding of four hatcheries statewide. This six year project will resolve deferred maintenance issues, provide safer and more productive facilities including enclosed rearing facilities with new raceways, a state-of-the-art visitor's center, space for native fishes (Lake Mead), and modernized water treatment. This will enable NDOW to continue to provide quality cultured trout to Nevada's anglers, achieve public outreach and incorporate culture strategies for endemic species.

**Trout Production Grant and Hatchery Refurbishment Grant:**  
 State share \$12 million  
 Federal share: \$21.5 million  
 Southern Nevada Lands Act - Visitor's Center, Lake Mead: \$1.1 million  
 Total cost: \$24.6 million



**Riser Creek Fish Barrier**

The Riser Creek fish barrier was constructed as an instream fish migration barrier to eliminate the connection between the nonnative salmonids in Riser and McDermitt creeks. This project was part of a larger effort to reestablish the McDermitt Creek drainage as an Lahontan cutthroat trout (LCT) meta-population. Mattresses were assembled from 2-inch by 2-inch chain link fence material placed on bedrock and tied into the banks. An apron was added to the downstream side and both were then filled with 2-inch or larger rubble material.

**Partners:** Bureau of Land Management (BLM), the United States Fish and Wildlife Service (US FWS) and the Bureau of Reclamation (BOR).

**Sport Fish Grant:** State share: \$2,154  
 Federal share: \$6,462  
 BLM share: \$9,500  
 and the USFWS and BOR share:

**Steptoe Valley Wildlife Management Area, 3-C Ranch Acquisition in White Pine County, Nevada**

The Nevada Department of Wildlife (NDOW) acquired the 6,426-acre 3-C Ranch, now known officially as the Steptoe Valley Wildlife Management Area, and about 10,000 acre-feet in water rights. NDOW partnered with the Rocky Mountain Elk Foundation who brokered the acquisition. The goals of the project are to maximize fisheries in two lakes (Cave and Comins lakes), to maximize elk, antelope, deer and nongame resources on the property, and to promote the recovery of sage grouse throughout the valley.

**Partners:** Rocky Mountain Elk Foundation

**Sport Fish Grant:** \$200,000  
**Wildlife Restoration Grant:** \$300,000  
**Motorboat Fuel Tax:** \$500,000  
**State Bonds:** \$3,000,000  
**Students at Cle Elum-Roslyn School**



**State Agencies Partner and Combine Programs for Boating Access Success Story**

**Rogers Landing, Yamhill County Oregon, Willamette River, mile (Boating Access funds plus BIG funds)**

*What is the project:*

Redevelopment of Rogers Landing began in 1992 with the addition of a four stall flush restroom. The next phases of construction were delayed due to flooding, funding limitations and permits. In 2000, the parking area was expanded from 100 stalls to 155 boat trailer and 50 single car spaces. The final phase of construction was the relocation and expansion of the old ramp and the addition of a transient tie-up float. The new three lane ramp is a unique design suspended by a cantilevered steel framework system weighing nearly 35 tons. The addition of 400 feet of boarding floats, 200 feet of transient tie-up and a debris deflection boom completed this 9 acre facility.

*Where is the project:*

Rogers Landing Marine Park is named after Joseph B. Rogers who received the land in 1847 as a Donation Land Claim. The site was originally used in the 1800s as a ferry landing. Rogers Landing is the only boat ramp that provides direct access to the Willamette River in Yamhill County. The Willamette River is the largest river within the State of Oregon, 12th in the nation in terms of volume and 66% of Oregon's population live within the Willamette River Valley.

*Why is it important (who benefits...what are the benefits)*

The previously existing two lane ramp was located at the end of the access road in a straight line to the water. The launch lanes were in such disrepair that one lane was completely unusable and the other required an experienced boater to safely navigate the large power loading holes and broken planks without damaging their trailer, boat or themselves. In addition, the ramp was located near a large water intake pipe used by the adjacent paper company. This created yet another safety concern for the boaters.

Yamhill County began working with the Marine Board nearly fifteen years ago, studying ways to improve and expand this facility. Rogers Landing was already at capacity with overflow parking expanding to the adjoining neighborhoods. The first improvement was the addition of sanitation, which greatly enhanced the usability of the upland grounds. The next set of improvements involved a very complex land lease agreement with the City of Newberg, Baker Rock Enterprises and S & P Newsprint. This took several years and an enormous amount of dedication by all parties to reach an agreement on land use and term of agreement.

Now that the land was secured for the parking expansion and ramp relocation, the needed facility could be constructed. The expanded parking area helped to resolve the conflict between boaters and facility neighbors. The three lane launch ramp and floats were relocated to an eddy improving traffic flow and ability to launch and retrieve boats very safely.

According to the Marine Board's Triennial Boater Surveys, Rogers Landing is consistently one of the top two facilities with the highest amount of boating activity on the Willamette River. We believe that the boating use at Rogers Landing will continue to grow with the addition of launch lanes, boarding floats and transient tie-up space for larger cruising vessels wanting to enjoy the American Heritage River.

This facility and Yamhill County received special recognition by the Marine Board for being the Best Grant

Project in the 2001-03 biennium, and for having a project manager who aggressively sought funding partners and remained dedicated to the successful completion of this boating facility.

The Oregon Dept. of Fish and Wildlife using federal Sport Fish Restoration funds, the U.S. Fish and Wildlife Service's Boating Infrastructure Grant funds, Oregon State Marine Board and Yamhill County in a combined partnership provided a total of \$1.3 million for the completion of the Rogers Landing Marine Park.

In addition, the City of Newberg, Baker Rock Enterprises and S & P Newsprint cooperated with Yamhill County in a complex land lease agreement, guaranteeing the facility will remain a cornerstone of public boating recreation in Yamhill County.



**City of Rainier, Rainier Transient Tie-up, Columbia River, Mile 67.7 (BIG)**

*What is the project:*  
Rainier Transient Tie-up Facility was one of the first projects funded through the Boating Infrastructure Grant program and it was the first Tier 2 to be completed in the nation. The new facility features 12-foot wide by 300 foot long concrete floats that are connected to shore by a series of gangways. The pumpout station was relocated to the new floats for improved access by the larger boats. This replaced the condemned floats that once glared at passing boaters.

*Where is the project:*  
Rainier Oregon is a small town of 1,690 people, carved from the base of the forested Coast Range mountains forming the southern shore of the Columbia River. The city's past as a lumber town and commercial fishing center ties it closely to a river that has served as a regional transportation hub since long before Oregon was a state.

*Why is it important (who benefits...what are the benefits)*  
Like many rural Oregon towns, the economy here has struggled in recent

*Rainier Transient Tie-up Facility, before*



*Rainier Transient Tie-up Facility, after*



years. The City of Rainier has been in discussion with the Marine Board for several years on how to best revitalize the waterfront to bring the recreational boaters back to their historic city center. The addition of the transient tie-up compliments the City's new riverfront park and is a cornerstone of the Rainier downtown revitalization plan.

This facility provided a strategic link in the Bi-State (Washington/Oregon) Transient Tie-up plan with a goal to form a network of transient facilities every 20-25 river miles along the entire river reach. The new facility serves as a critical way point downstream from Astoria or upstream to Portland.

The transient boaters are enjoying access to the national historic townsite, day use park, services/supplies and restaurants while traveling the Lewis and Clark River Trail. Increased use by recreational boaters is anticipated during and after the bicentennial celebration of the Lewis and Clark expedition. The completion of this facility has provided a tremendous

economic benefit to this little town while meeting an outstanding need of the boaters on this reach of the Columbia River.

The transient tie-up facility was nationally recognized at the States Organization for Boating Access (SOBA) conference in September 2003. The City of Rainier transient facility received the Outstanding Project Award for Harbors and Marinas. This prestigious award is made only once a year to a project that has demonstrated high quality, unique design and construction, while providing a beneficial facility with economic benefits to the community.

*What dollars were used, and how much (include partners)*

The Rainier Transient Tie-up project was completed through the assistance of the US Fish and Wildlife Service BIG program, City of Rainier, Rainier Economic Development Council and private contribution from the Columbia River Yachting Association, for a total project cost of \$442,000.

**National Coastal Wetlands Conservation Grant Program Funds John's River Restoration Project**



Grays Harbor is one of the largest, most important estuaries on the Pacific Coast. It provides habitat to a diverse group of wildlife species as well as critical migration habitat for over one million shorebirds each year. The John's River Restoration Project is located near the mouth of John's River on the John's River Wildlife Area. This site is approximately eight miles west of Aberdeen, Washington and in the south portion of Grays Harbor.

The National Coastal Wetlands Conservation Grant Program provided \$65,000 to the Department of Fish and Wildlife (WDFW) recently to restore 130 acres of estuarine wetland habitat and 98 acres of freshwater emergent wetland habitat. Estuarine restoration occurred by the removal of a tide gate and culvert and the breaching of the levee in ten locations to inundate the site with salt water and return the site to a native high salt marsh vegetative community. In addition, 98 acres of palustrine emergent wetland habitat has been restored through the construction of drainage ditch plugs, delevelling of land once managed for pasture and farmland, and the addition of two water control structures allowing for the management of a diversity of habitat types. The freshwater wetland restoration has restored high quality wetland vegetation such as native sedges and rushes.

These large estuarine habitats are critical for preservation because of the wetland losses in Grays Harbor estuary associated with filling, dredging, and port and industrial development. In southwest Washington many of the river mouths have been diked for farming practices. John's River has been identified as a key target area for restoration activities through multiple plans including the Pacific Coast Joint Venture Strategic Plan for Southwest Washington Coast; the Ducks Unlimited Continental Conservation Plan for North America's Waterfowl Populations; and the Grays Harbor County Shorelines Master Plan.

This restoration will benefit multiple fish and wildlife species. Each year 50,000 or more ducks and geese including pintails, mallards, dusky Canada geese, American wigeon and brant migrate through Grays Harbor. The area provides critical migration habitat for up to one million shorebirds such as western sandpipers every year. In addition, wintering shorebirds such as dunlins and greater yellowlegs, wintering bald eagles and peregrine falcons utilize these valuable habitats. Also, the estuarine habitats provide valuable rearing habitat for migrating juvenile coho, chinook, and chum salmon, and sea-run cutthroat trout.

**Northern Leopard Frogs Research Benefits From State Wildlife Grant Program**



*Leopard frog breeding pond, Grant County, Washington*

Washington Department of Fish and Wildlife (WDFW) biologists are using \$171,000 of the Department of Interior, States Wildlife Grants Program funds to study the ecology of northern leopard frogs in eastern Washington. Historically occurring in at least 17 distinct areas within the state, leopard frogs may now occupy only two historic locations, and have undergone similar declines throughout the northwest. Numerous factors have been posited for leopard frog declines, including wetland habitat loss, non-native fish and amphibian predators, altered hydrologic cycles, water pollution, and atmospheric

changes. WDFW has initiated aggressive monitoring and research activities to identify local factors responsible for leopard frog declines. This information will be used to inform management decisions about future leopard frog conservation in Washington.

The only known Washington state populations of leopard frogs now occur in Grant County, in an area containing hundreds of small wetland ponds surrounded by intensive agricultural activity. To date, WDFW has surveyed roughly 150 pothole wetlands to



*Frog data collection and radio-transmitter attachment*

determine frog population distribution patterns throughout the remaining occupied area. In addition to frog surveys, funds have supported habitat assessments, implementation of population trend monitoring, and surveys of non-native fish and bullfrogs. One study component involves evaluating rehabilitation of a 4.5 km<sup>2</sup> area containing dozens of ponds occupied by leopard frogs in the mid 1980s and now inhabited by carp, bullfrogs, and several warm-water gamefish species. Another study component involves identifying habitat,

water quality, and fish community relationships of breeding, post-breeding, overwintering, and migrating leopard frogs to determine the suite of seasonal conditions that favor leopard frog reproduction and recruitment. Once these relationships are better understood, WDFW plans to restore and enhance potentially suitable local wetland sites for leopard frog reintroductions. If reintroductions prove successful, WDFW may then attempt habitat rehabilitation and translocations into potentially suitable historic locations.

**State Targets Private Lands Program with Wildlife Restoration Funds**

The Washington Department of Fish and Wildlife's (WDFW) private lands program is a cooperative effort between the WDFW, United States Fish and Wildlife Service, United States Department of Defense, Army Corps of Engineers, private landowners, and volunteer conservation groups. The program's focus is to enhance fish and wildlife habitat statewide on private lands and make private lands available for public recreation. For more than forty years, it has been primarily funded with Wildlife Restoration funds (\$375,000 FY03) and is the foundation of a long-term and successful relationship with between private landowners and WDFW.



*Over 3.4 million acres of private lands are currently open to public hunting as a result of WDFW's private lands program.*

Species stewardship on private property is especially important in Washington. With more than half of Washington's land base in private ownership, it's clear that preservation of the state's rich fish and wildlife heritage will largely be determined by the ability of private landowners to provide habitat for fish and wildlife.

Over the last several decades widespread changes in agricultural practices have both increased farming efficiencies and reduced the amount of habitat available for many wildlife species. This has resulted in the decline of many wildlife populations and less opportunity for the public to enjoy wildlife-based recreation on private lands.

To address this problem, WDFW through its private lands program has established cooperative agreements with more than 1,300 private landowners. Agreements typically include some type of habitat development such as shrub plantings, seeding, or fencing. In return, the landowner permits public access. An access program is designed to meet individual landowner needs and lands are posted with "Feel Free to Hunt", "Register to Hunt", or "Hunting by Written Permission" signs. Over 3.4 million acres of private lands in Washington are currently open to public hunting through this program.

Another important component of the program is continual interaction and cooperation with other state and federal agencies, farm groups, and sporting/outdoor organizations. To capitalize on the great potential the federal Farm Bill program has to benefit fish and wildlife on private lands, WDFW staff work with United States Department of Agriculture staff to incorporate fish and wildlife into Farm Bill program implementation whenever possible. Since May of 1993, over one million dollars has been contributed to private lands effort by conservation groups, sports clubs and the public statewide. Annual contributions should continue into the foreseeable future.

### Sport Fish Restoration Program Funds White Sturgeon Studies



On the Columbia River, recreational fishing opportunity continues to be allowed on a fish that many consider a hold over from the last ice age, approximately 10,000 years ago. The largest freshwater fish in North America is the white sturgeon. Historical records acknowledge white sturgeon upwards to 20 feet in length and weights of 1,800 pounds. A female sturgeon from the Columbia River is reported to have been 12.5 feet long, weighed 1,285 pounds, and contained 125 pounds of eggs. White sturgeon are a long-lived fish species, and a recent study in the Columbia River observed a 104-year-old fish.

The nearly \$200,000 provided each year through Sport Fish Restoration and State funds gives the Washington Department of Fish and Wildlife the

needed support for the Status of White Sturgeon in the Mainstem Columbia River Program to continue white sturgeon abundance monitoring, further identify and understand life history needs and associated population dynamics of the fish. The funds have allowed the agency to continue its white sturgeon research and monitoring efforts, which have benefited sport anglers through the determination and managing for appropriate fishery exploitation rate levels that ensure continued population health and long-term sustainable benefits.

An often unrealized benefit of the research and the further understanding of the needs of these fish have been the development of citizens groups which actively participate in fishery planning activities and support white sturgeon protection.

### Wild Salmon Production and Survival Evaluation Studied with Sport Fish Restoration Funds

The Wild Salmon Production and Survival Evaluation Program collects and analyzes stock assessment data essential for improved recreational harvest and habitat management, predominately in western Washington. This program quantifies the production and survival of critical wild salmon stocks and relates these measures to spawner abundance and environmental and habitat conditions through determining the primary components of inter-system and inter-annual variation in stock abundance. Salmonid populations are estimated using various trapping gear as downstream migrants entering saltwater and as upstream migrating adults. Coded-wire tagging wild coho smolts and the coastwise catch sampling program, in conjunction with the escapements counted at the adult traps, measures harvest and marine survival rates.

Wild salmon originating in Washington State's freshwater ecosystems are the focus of complex annual international and inter-jurisdictional fishery planning and management. Increasingly, these stocks are also the object of costly, long-

term restoration efforts. The \$803,000, 75% of which is SFR funds, Washington Department of Fish and Wildlife budget for the Fiscal Year 2004 will allow the agency to work with various other governmental agencies, including federal, state, and tribal fish and other land and water management agencies, local governments, and citizen/volunteer groups to engage in comprehensive planning processes to design programs that will protect and restore freshwater habitats of anadromous salmonids, and supplement certain wild populations with artificial production. Assessing performance of these collective efforts requires properly designed and conducted monitoring programs. Maintaining each stock's production potential requires no less than protecting habitats and ensuring adequate spawning escapements. Maximizing annual benefits from the combined hatchery and wild salmon resource relies on accurate annual stock abundance information of the critical wild runs which constrain harvest opportunities where these stocks are co-mingled.

This program is a portion of a long-term statewide research effort started in 1977, with the formation of the Freshwater Production Evaluation Unit, a work group within the agency's Science Division. In the late 1970's this project established upstream/downstream-migrant trapping facilities at four study streams in western

Washington. Wild coho smolt production, marine survival, harvest, and escapement have been measured continuously at these study sites since 1978. In 1981, the program was expanded to include quantifying wild coho production in additional large river systems.

### Wildlife Restoration Funds Assist in International Research Project

While it has been banned in the United States for more than a decade, the toxic legacy of lead birdshot continues to take a grim toll on visiting northern trumpeter and tundra swans in Skagit and Whatcom counties in Washington state. Research has shown that from the day a swan picks up lead shot, it will take about three weeks for that bird to die.

The winter of 2001-02 was the deadliest on record, with an estimated 247 swans—95 percent of them trumpeters—dying from lead poisoning in the two counties and adjacent portions of British Columbia (BC). About 4,000 swans overwinter in Skagit County, with another 1,000 or so in Whatcom County.

The birds are not being shot. Instead, swans are ingesting spent lead shot that has settled onto the bottom of shallow lakes and ponds where the birds feed. The lead shot ends up in the bird's gizzard where the soft metal is ground up and slowly leaches into the swan's bloodstream.

WDFW has teamed with Canadian fish and wildlife biologists, the United States Fish and Wildlife Service, the Trumpeter Swan Society, the Bellingham Chapter of the Audubon Society, and the Pilchuck Valley Rehabilitation Clinic to identify the places where swans are ingesting spent lead shot, and finding ways of removing the poisonous material from the environment.

The main thrust of the work has been to collect more data on the birds'

movements. A total of 26 swans—19 in Whatcom County, plus seven in BC—have been fitted with radio-transmitting collars to track the birds' movements throughout the region, and possibly pinpoint the places where they're picking up spent shot. Swans were tracked to 50 different sites. Two of the collared birds died from lead poisoning, and their deaths led to focusing on about 12 specific locations. The team has done preliminary core sampling at some of the sites of interest, and early analysis of the data has not yet revealed any definite lead shot sources. Based on early analysis, there appears to be a window of time when the birds are becoming exposed to lead shot.

Non-toxic shot requirements were phased in over time, beginning in 1986, and ending in 1991 throughout the United States. Non-toxic shot has been required for all waterfowl hunting in Canada since 1999, but has been required in parts of BC for almost 10 years. Non-toxic shot is also required for public hunting areas that are used for both pheasant and waterfowl hunting, and includes all of the pheasant release sites in northern Puget Sound. Hunters are encouraged to convert to non-toxic shot for all upland bird hunting.

This project was partially funded with Pittman Robertson funds, and includes contributions from the Trumpeter Swan Society, US Fish and Wildlife Service, Canadian Wildlife Service, and WDFW license funds.



**Wildlife Restoration Funds Support Public School Student Research on Cougars**



*Houndsman and students collect data from captured male cougar.*



*Cougar*

*Students, community members, and Department biologists track a cougar in the snow.*

Students at Cle Elum-Roslyn School District in Cle Elum Washington are taking on the cougars. Not a contest with their rival sports team, but these students are investigating the ecology of Puma concolor in this rapidly developing rural community. This investigation integrating science and education is titled Project C.A.T. (Cougars and Teaching). Students are working with research scientists from Washington Department of Fish and Wildlife (WDFW) to investigate how cougars are responding to changes in this rural central Cascade Mountain community as this area is being transformed from a rural to urban landscape. Driven by the economic engines in the Puget Sound region, this Kittitas County community is a mere one hour commute from Seattle on Interstate-90. Residential development and interstate expansion to accommodate commuters and recreationists will present a new environment for wintering herds of elk, deer and cougars that now occupy this landscape. In light of concerns for human-cougar interactions these students and research scientists are seeking to understand how cougars respond to these changes with goals to educate and to design programs and policies where cougars and humans can coexist in the future, as they do presently.

Funded by Wildlife Restoration, WDFW, Discuren Foundation and other private grants to the Cle Elum-Roslyn School District, students and scientists are capturing cougars and marking them with global positioning satellite (GPS) collars. Programmed to collect precise positional data at four hour intervals, these collars give students, scientists, and the community an insight as to where cougars are in relation to habitats, deer and elk herds, and sites where people recreate and live. Students assist research scientists in all aspects of data collection and analysis; from assisting on telemetry flights, field verification of forest conditions for GIS habitat maps, to plotting GPS positional data on computer-generated maps. This is more than a science project for the school as aspects of this research are integrated into journalism, history, physical education, and other curricula.

Begun in 2001 this education and research program is planned to monitor the cougars response as this community changes over eight years. Another phase of this work will soon begin on the western slope of the Cascade Mountains, where cougars may respond differently as prey and habitat conditions differ from the current study area.





**Special Highlight  
Section of  
Region 7**

## Federal Aid in Wildlife Restoration Program Helps Caribou Comeback



*Caribou have begun a comeback.*

700 miles of spruce forests, river bottomland and rolling hills stretch between Fairbanks, Alaska, and Whitehorse in Canada's Yukon Territory. At the heart of this country, straddling the Alaska-Yukon border, the Fortymile River flows into the Yukon River. This region is home to the Fortymile Caribou herd.

In the 1920s, the size of the herd ranged from 350,000 to more than half a million animals. By 1950 the herd had dropped to about 50,000, and in the late 1960s, Alaskans and Yukoners watched the herd decline to about 7,000 animals.

A variety of factors, including tough winters, hungry wolves, and overhunting (due in part to the vastly improved highway access to the region) had taken their toll, and the herd dropped to a fraction of its former size, inhabiting a small portion of its former range.

The region's abundant willows, lichens and grasses had supported a far larger herd, and the range was in good condition. The herd grew somewhat over the next 20 years, but stabilized at about 22,000 animals. Although calf birth rates were good, the population remained low due to poor calf survival.

In the mid-1990s, scientists, hunters, environmentalists and Natives groups from both sides of the border formed the Fortymile Caribou herd planning team to develop a strategy to build the herd.

Their mission was straightforward: To restore the abundance and diversity of wildlife in the ecosystem, of which the Fortymile herd is the most important indicator species. To promote healthy wildlife populations for their intrinsic

value, as well as consumptive and nonconsumptive uses.

The recovery plan involved reducing hunter harvest for five years and improving summer calf survival by reducing predation. As part of the recovery effort, Yukon stopped all sport hunting of Fortymile caribou, the Tr'ondek Hwech'in First Nation voluntarily gave up their subsistence harvest and Alaskans reduced their annual harvest from 400-500 caribou to 150 bulls per year for the duration of the plan.

Reducing wolf predation was a key element of the plan. A combination of public trapping and non-lethal methods, such as moving wolves out of the area and sterilizing the remaining dominant pair, greatly increased summer caribou calf survival. Several long, warm summers and high pregnancy rates complemented the efforts.

Last fall—for the first time in 30 years—the growing herd moved into territory that had been unoccupied for decades. This year, Alaska Fish and Game biologists Craig Gardner and Rod Bortje counted 43,000 caribou in the Fortymile herd, confirming that the herd has doubled in size in the past eight years.

Federal Aid in Wildlife Restoration helped fund the initial Fortymile Caribou planning team and plan implementation and has continued to fund annual management, monitoring, and research activities (approx. \$150,000/yr) to help insure that the herd's recovery isn't just temporary but a long-term success.

*By Riley Woodford  
Alaska Department of Fish and Game*

## Alaska's Kenai Moose Research Center is a World Leader in Moose Science



*Feeding time: Moose researchers John Crouse, Stacy Jenkins and Tom Lohuis of the Alaska Department of Fish and Game bottle feed baby moose at the Kenai Moose Research Center near Sterling.*



*Hungry baby: Tom Lohuis, the new director of the Kenai Moose Research Center, feeds a five-month old moose calf.*

On a crisp morning this fall, biologist Stacy Jenkins tucked two oversize baby bottles under her arms and rallied her reinforcements. Her three babies were just a few months old, but they were pushy, hungry and well over 100 pounds each.

Tom Lohuis carried a third bottle of warm milk, and John Crouse swung open the gate at the Alaska Department of Fish and Game's Kenai Moose Research Center (KMRC) near Soldotna, Alaska. The three moose, bleating at the sight of breakfast, rushed headlong for the center's three staff biologists.

Moose are popular with photographers and wildlife watchers, and moose are hunted by more people than any other animal in Alaska. About 7,000 moose are harvested each year in Alaska, providing more than three million pounds of meat.

Knowing what makes a moose healthy, and what it takes to maintain healthy moose populations, is important to the Alaska Department of Fish and Game—and to wildlife managers throughout the North.

A full-grown wild moose can be a dangerous animal to study. A kick from a moose can kill a wolf, and more than one person has been on the receiving end of such deadly blows. By conditioning young moose to human contact, biologists at the KMRC are cultivating cooperative subjects.

"This facility has so much to offer," said Jenkins, who has worked at the center for five years. "There are things you can do here that you can't do in the wild, and plenty of things you can test out and apply to the wild."

Federal Aid in Wildlife Restoration contributed about \$200,000 of the \$270,000 cost of KMRC operations and research projects conducted there in FY 2003. In fact, Federal Aid has been providing key funding for the research center for over 3 decades. Built in the late 1960s, the facility is an hour's drive down gravel roads from the nearest town, tucked into a landscape of trees, meadows and small lakes. Tall fencing encloses four pens, each a square-mile, home to 19 moose and 23 caribou. The lab and facilities, bunkhouse and caretaker's cabin provide research infrastructure in a ranch-like setting.

Over the years, moose researchers from Norway, Sweden, Russia, Canada and other American states have worked on projects at the center.

"More than 250 scientific papers based on research at the center have been published," said Fish and Game Deputy Commissioner Wayne Regelin, who worked at the center in the 1970s. "A lot of pioneering work has been done at the center—how to capture moose using drugs, studies on moose-habitat relationships, various ways to evaluate moose physical condition—it's a leader in moose research."

*By Riley Woodford  
Alaska Department of Fish and Game*

### Sport Fish Restoration Funds Help Count Cutthroat in Copper River Special Management Area



Concerns over proposed major road construction, and the potential impact of recreational anglers on stocks of cutthroat trout in the pristine fishery area of Martin River, prompted the establishment of the Copper River Special Management Area for Trout in 1999. The area's management plan stipulates that only unbaited, single-hook, artificial lures are allowed in all fresh waters south of Miles Glacier, and east of the Copper River (excluding the Clear Creek drainage), and all waters draining into the Gulf of Alaska west of Cape Suckling. These waters are also designated as catch and release only for all trout. Although past data collection efforts have helped establish the presence or absence of cutthroat and rainbow trout in some of the systems within the Special Management Area, very little information has been collected documenting population characteristics. The Alaska Department of Fish and Game needs such information to manage the trout stocks to maintain historic age and length distributions.

The Alaska Department of Fish and Game began a study in 2001, supported by Federal Aid in Sport Fish Restoration funds, to provide baseline data on the length, age, and distribution of adult trout in this Special Management Area. This data will also provide better insight into abundance of trout and Dolly Varden, and the potential for sport fisheries in the area. The information will help resource managers craft regulations that provide for sustainable fisheries in the survey area. The objectives are to determine the length and age distributions of cutthroat and rainbow trout, and to gather data on the distribution and movements of these species. Scales were obtained from all captured trout for age determination, fork length was measured, and large trout were tagged to facilitate later recapture and identification of individual movements. Catch per unit effort (CPUE) information was also obtained to index trout and char abundance.



### State Wildlife Grant Program Sows the Seeds of Tomorrow's Science in Remote Alaska

The Alaska Department of Fish & Game, Division of Sport Fish has, with the help of State Wildlife Grant Program funds, recently begun a new project in partnership with rural students in remote parts of interior, western, and northern Alaska. This region includes the Yukon and Kuskokwim river drainages as well as the Upper Copper/Upper Susitna and the Arctic, including the Noatak River, and a myriad of tundra lakes, ponds and wetlands.

The goal of the program is to reinforce the sense of stewardship in the next generation of Alaskans and to create "citizen scientists" who will be able to help monitor the environment of this remote rural area using both traditional and modern science. Erik Anderson, an Alaska Department of Fish and Game employee stationed in Fairbanks, flies to villages off the highway system to bring (and collect) information about the life histories and biology of the fish in nearby rivers and lakes, as well as the complex food web that supports fish populations (including aquatic invertebrates, plankton, and macrophytes).

In 2003 Erik hosted workshops for the Fairbanks North Star Borough School District and the Yukon-Koyukuk School District. These events emphasized hands-on exercises designed to employ, and build upon, the traditional ecological knowledge of Native Alaskans. Attendees learned life history patterns and how to identify aquatic invertebrates, plankton and local fish species.

Erik gives presentations both in English and in the Yup'ik language. He recently traveled to Unalakleet to host a week-long science camp for young students from surrounding Inupiaq and Yup'ik Eskimo villages. The theme of the science camp was "Aquatic Ecosystems." Attendees tested water for dissolved oxygen, pH, nitrates, and other indicators of water quality. They

dissected pike, and used the contents of fishes' stomachs to study the importance of aquatic invertebrates to freshwater fish populations.

In addition, camp participants learned about the concepts of sustainable yield, population dynamics, carrying capacity, and limiting factors, and discussed local subsistence issues. Erik also gave presentations in a number of surrounding villages. The seeds planted during such programs will ultimately increase the Department of Fish and Game's data concerning, and understanding of, the ecosystems of this huge and complex region that has few people and difficult access.

The Alaska Department of Fish and Game plans to expand this program to more villages in the coming years.



*Alaska Department of Fish and Game biologists will reap the benefits of local knowledge and participation as a result of this innovative State Wildlife Grant project.*

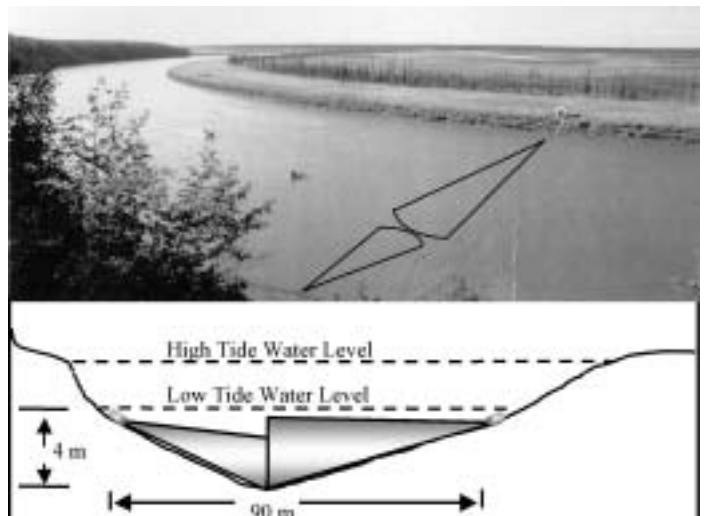
## Sport Fish Restoration Funds Bring Sonar to Salmon

The Kenai River, located in southcentral Alaska on the Kenai Peninsula, supports one of the largest and most intensively-managed recreational chinook salmon fisheries in Alaska. Kenai River chinook are among the largest in the world, and the fishery sustains in excess of 100,000 angler-days of fishing effort annually. Accurate assessment of the in-river return of chinook salmon is paramount to meeting escapement goal requirements and thus sustaining the population.

The Kenai River chinook salmon sonar project, operated by the Alaska Department of Fish and Game and funded with Sport Fish Restoration funds, has used side-looking sonar to assess chinook salmon returns to the Kenai River since 1987. The project originally used dual-beam sonar technology, but switched to split-beam technology in 1995 as this technology provided additional acoustical information for each individual target (fish), and thus improved the accuracy of chinook salmon counts. Estimates of in-river return generated by the project provide the basis for estimating spawning escapements, implementing management plans that regulate harvest, projecting returns, and setting future escapement goals.

*New sonar technology allows biologists to "cover" most of the broad Kenai River.*

Hydro-acoustic assessment of chinook salmon in the Kenai River is complicated by the presence of other, more abundant, species (primarily sockeye salmon) that migrate concurrently with the chinook. The accuracy of Kenai River chinook salmon sonar estimates relies on our ability to acoustically separate these species (i.e., to classify a sonar target by species, using acoustical data associated with that target). This has led to further Sport Fish Restoration funded research to identify acoustic parameters, such as variables based on echo envelope length, which can assist in differentiating between fish species. In addition, a new high-definition imaging sonar (DIDSON) has been evaluated at the site for its ability to improve differentiation between species. DIDSON is the latest in sonar technology, originally developed by the University of Washington's Applied Physics Lab for military applications. Preliminary results indicate that, although the DIDSON is limited in range (i.e. distance it can cover across the river), it shows some potential for species differentiation. We will continue to evaluate the DIDSON while, at the same time, using paired data from the DIDSON and the split-beam sonar system to evaluate and improve our current methods of species differentiation.



# Appendix

All information and tables previously found in the appendices in earlier Program Updates are now on the Federal Assistance homepage at: <http://federalaid.fws.gov/>.





U.S. Department of the Interior  
U.S. Fish & Wildlife Service  
Division of Federal Assistance  
<http://www.fws.gov>

