

# Director's Report to the Fish and Wildlife Commission

## March 9-10, 2007

### *"A Sound Stewardship of Fish and Wildlife"*

We serve Washington's citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable fish and wildlife-related recreational and commercial opportunities.

#### **FISH AND WILDLIFE GOAL:**

##### ***ACHIEVE HEALTHY, DIVERSE AND SUSTAINABLE FISH AND WILDLIFE POPULATIONS AND THEIR SUPPORTING HABITATS***

**Sea Lion Hazing Initiated Below Bonneville Dam:** Staff from Region 5 and from Oregon Department of Fish and Wildlife (ODFW) began hazing activities in the Columbia River from Bonneville Dam downstream about six miles to Navigation Marker 85 to drive California and stellar sea lions out of this section of the river. The marine mammals moved into the area to prey upon salmonids, including ESA listed stocks, and broodstock white sturgeon that congregate just below the dam. The hazing effort will intensify in March and continue through May. WDFW and ODFW are each providing one boat and crew two days a week during February. Hazing operations expanded to seven days a week on February 26, with additional agencies participating. Activities during February were limited to the use of commercial grade cracker shells and rubber buckshot rounds.

**Investigation of Possible Wolf Sighting:** Wildlife staff spent a day in the GMU 113 area, where reports of wolves have been common for a couple years now. Two log truck drivers were encountered on Mill Creek/Sylvis Creek. Both indicated they had seen and heard wolves this winter. They also reported wolf sightings or evidence in those drainages for at least two winters. The East Branch LeClerc Creek was also driven, and wolf tracks were seen and photographed. Two hound handlers were encountered; they too reported numerous observations of wolf tracks from Mill Creek to LeClerc Creek, noting it was especially common to have one large wolf in the vicinity of a cougar they have pursued over the last couple years. Everyone interviewed reported wolves, but also mentioned their presence did not pose a problem and that there certainly was plenty for them to eat, as moose, elk, and deer numbers were high. The hound handler indicated he did not have any trouble with his dogs encountering wolves thus far.

**Washington Wildlife and Recreation Coalition (WWRC) Legislative Day at the Capitol:** Lands Division staff developed a display for the legislative reception in the State Capitol. The display was viewed by WWRC members, sponsors, and state legislators to generate understanding and support of the Washington Wildlife and Recreation Program and the associated 2007-09 Budget request of \$100 million. Due to the efforts of staff, the 8' x 8' display was completed. The display highlighted the Okanogan-Similkameen acquisition, as well as new projects in both the restoration category and facility renovation category. Following the WWRC Board meeting, a reception was held at the Governor's Mansion.

**Abalone Restoration Pilot Study:** Under a SeaDoc Society grant with the University of Washington, the shellfish dive team began field work in the Strait of Juan de Fuca to identify potential outplant sites for juvenile Pinto abalone. Abalone stocks in Washington have undergone significant declines, and abundance is now so low that intervention is needed for population recovery to take place. This is the initial field trial in the pilot study to determine if hatchery reared Pinto abalone can be successfully introduced to the wild in Washington. The juvenile abalone that will be outplanted have received health screening by two shellfish pathologists and are certified to be free of shellfish diseases. Prior to outplanting into protective modules, these abalone will be tagged to monitor individual growth and survival. All outplanted abalone will be removed in one year to reduce potential genetic impacts to wildstocks and to assess the genetic profile of survivors.

**Mt. Spokane Ski Area Expansion:** The Mt. Spokane ski area is located on the south face of Mt. Spokane. The north side is used by cross-country skiers and day hikers but is largely untouched. The State Parks Commission is undergoing a scoping exercise looking into expansion of the ski area to the north face of Mt. Spokane. The north side includes heavily forested areas that are important for a number of PHS and state-listed species as well as having confirmed presence of federally listed Canadian Lynx. Staff submitted comments to the Washington State Parks and Recreation Commission and the Mt. Spokane State Parks Advisory Committee. Highlights of the comments include: the use of this area by a variety of WDFW Priority Species and Species of Concern, including rare forest carnivores, elk, moose and multiple species of birds and bats; preservation of connectivity and corridors to other preserved natural areas; and potential impact on streams in the Little Spokane watershed.

**Big Sheep Creek HPA Denial Appeal:** Staff issued a denial letter for mineral prospecting on Big Sheep Creek from the mouth to the falls. This reach is unique in that it is the only tributary to Lake Roosevelt that has adfluvial migration and spawning of rainbow, kokanee and bull trout. The kokanee issue is particularly sensitive because millions of BPA dollars are being spent on kokanee plants into Lake Roosevelt with the goal being exactly what is occurring on Big Sheep Creek: successful natural spawning of kokanee. As co-managers of the Lake Roosevelt fishery, the Colville and Spokane tribes have vested interest in the success of the kokanee program. Eastern Washington University is engaged in research with the Spokane Tribe of Indians to monitor the kokanee program. The tribes are opposed to mineral prospecting at anytime of the year. Staff meetings have determined that we have reasonable evidence to support a denial, particularly for the entirety of July and August. The prospector has elected to pursue a formal appeal. The Spokane and Colville Tribes have agreed to provide technical information for the hearing and may testify if needed.

**Statewide RMAP Program:** The planning phase of the RMAP program has come to an end and all the industrial timber owners are transitioning into implementation. WDFW is working diligently with the Department of Natural Resources to refine their database and ensure that all completed projects meet the new Forest Practice standards, as negotiated in the Forest & Fish Agreement.

**Wild Horse Wind Power Project:** The transition of ownership and management of the Wild Horse Wind Power Project from Horizon to Puget Sound Energy is complete. The construction phase of the project is over, the wind farm is at production capacity, and day-to-day operations and maintenance have been transferred. Seeding and restoration of the site per contractual obligations was about 80 percent complete before the site was snowed in for the winter. Seeding and erosion control work will resume in the spring. Horizon and its subcontractors will remain on retainer to complete site restoration work. We remain concerned with the discrepancies between the impacts that occurred during site preparation and construction and impacts described within the environmental impact statement. The discrepancy of most concern is the difference between the typical 6-foot wide disturbance footprint described for the underground transmission cables in the EIS and what is observed at the project site. Where multiple circuits were installed parallel to each other adjacent to an access road, it was found that cable trenches must be spaced 20 feet apart rather than in the same trench due to concerns associated with heat dissipation in basalt rock, thereby creating a much wider footprint than anticipated. Thus, in areas where seven parallel cable trenches converged, the clearing limits exceeded 200-feet wide in some of the most sensitive habitat at the site, potentially affecting ecological connectivity and creating migration barriers for some species of wildlife. Further discussion and monitoring of site restoration activities will occur in the spring. Staff are preparing a synopsis of challenges and concerns as well as successes regarding this project for use in updating WDFW's Wind Power Guidelines.

**Cabin Creek and Upper Yakima River Basin Acquisition Project:** Ownership of over 1,400 acres in strategic locations near the town of Easton, along the Yakima River and in the lower reaches of Cabin Creek, was recently transferred to WDFW. These lands were acquired through cooperative work between American Forest Resources, The Cascades Conservation Partnership (CCP), the Cascades Land Conservancy, the U.S. Fish and Wildlife Service, the Monahan family, Washington State Parks, Washington Department of Natural Resources, and WDFW. Because the parcels are outside of the National Forest boundary, the USFS could not acquire or assume ownership of them. Due to their strategic location in regard to ecological connectivity and fish habitats, particularly along the Yakima River, they were identified as a high priority for acquisition, and WDFW agreed to assume ownership. WDFW worked with CCP for federal endangered species Section 6 land acquisition moneys. These lands are low elevation and close to Interstate 90. Therefore, the threat of development was great, and this project has successfully protected key habitat connectivity in a landscape transitioning from forestry to rural housing. WDFW Habitat, Wildlife, and real estate staff all played key roles in making these acquisitions a reality.

**Land Exchange:** Staff convened a District Team meeting to review exchange parcels between Washington Department of Natural Resources (DNR) and Blixeth. The group looked at parcel location in relation to existing public ownership and reviewed PHS data to see what resources were inventoried on various parcels. The district team's findings were forwarded to the director's office for incorporation into the agency's response to DNR. Overall, Region 3 is very pleased and supportive with the parcels DNR will pickup in this process, eliminating the checkerboard ownership pattern in some important areas and eliminating the threat of development.

### **HPA Investigations:**

- 1) WDFW Officers and Habitat Biologists met at Woodard Creek and went up to check on a mudslide on Rock Creek in Stevenson. While on site, they were approached by the county engineer and road foreman to get emergency HPA approval for a major excavation on lower Rock Creek to protect the bridges. Much time was spent checking the work as it is still going on 24 hours a day. Officers coordinated with Fish Biologists to get a crew to be at Rock Creek when the work started to clear any fish caught in the work.
- 2) Officers received two complaints of mud and sediment in the Chewuch River. The sediment was coming from the construction project at the Fulton Dam on the Chewuch. Due to multiple violations of the contractor's HPA, the project was shut down, and all work was to be stopped until the contractor has come into compliance and has provided a written plan to Biologists for work to remove illegal materials and prevent sediment. Work resumed after two days once a plan was approved.

### **HPA Meetings With USFS & USFWS & Proponent of Rimrock Motocross Event:**

Staff organized meetings between WDFW, U.S. Fish and Wildlife Service (USFWS), and U.S. Forest Service (USFS) to review the annual Rimrock Motocross Race monitoring efforts from this year's event. This race is held annually in the bed of Rimrock Reservoir after it has been drawn down for irrigation use. Prior to WDFW involvement, the race was routed through streams and within bull trout and kokanee spawning reaches. WDFW and the USFS have required permits and monitoring of this event over the past several years to prevent impacts to fish and wildlife habitat during the event. Riding within wetted streams and riparian vegetation is not permitted. WDFW and USFWS conducted detailed pre-race, race-day, and post-race monitoring of stream conditions, bull trout spawning status, ORV use, and adherence to HPA provisions. A larger concern around the bull trout/kokanee spawning streams is unregulated public ORV use during non-race weekends. We have employed "adaptive management" technique and have fostered a good working relationship with the motorcycle club. New provisions for future races are being drafted.

**Puget Sound Technical Assistance:** The Puget Sound Initiative has provided substantial additional funding to the Department of Ecology to conduct cleanup of contaminated sediments in Puget Sound under the Model Toxics Control Act. As part of this effort, Ecology is working with WDFW to develop a process that integrates sediment cleanup and habitat restoration. Staff from the Environmental Services Division attended a recent meeting of the Toxics Cleanup Program and provided a presentation on WDFW's role (co-trustee and regulatory), an overview of regulations, an overview of restoration approaches, and some site-specific examples of habitat restoration. The meeting was well attended (~35 Ecology staff) and good discussions followed the presentations. Providing technical assistance to Ecology on habitat issues during sediment cleanup actions should result in improved nearshore conditions at cleanup sites in Puget Sound.

**Crab Creek Hydro Project Proposal:** A FERC Preliminary Permit has been granted for the Sentinel Mountain Pumped Water Storage Project on WDFW land located in Crab Creek near Moses Lake. This project may be where dams might be proposed for water storage through the Columbia River Water Management Plan (CRWMP). If built, the project would consist of two dams, two reservoirs totaling 9,600 acres holding 867,000 acre-feet of water, two powerhouses, tunnels and transmission lines that would generate approximately 2,628 gigawatt-hours that would be sold to a local utility.

**Priority Habitats and Species List Update:** Staff from the Fish, Wildlife, and Habitat programs met to identify needed changes to the Priority Habitats and Species (PHS) List. Changes discussed included the possible addition or deletion of PHS species, renaming or redefining some habitat categories, and reorganizing the list to be more user-friendly. Several subcommittees were formed to examine specific issues such as definitions for marine habitats, integration with the Comprehensive Wildlife Conservation Strategy, and definition of Urban Natural Open Space and Rural Natural Open Space. Oversight for the project is being provided by a cross-program "PHS/GMA Core Team" that will receive a project update in late March. The PHS update should be completed by July.

**Lynx Ecology Study:** WDFW and Department of Natural Resources staff in the Loomis area captured and marked two male lynx at the north end of the study area, along Long Swamp and Middle Fork Toats. These two lynx appear to be occupying adjacent home ranges. One animal's home range appears to have been partially burned (fire "treated"), while the other male's range may have not been treated. If this is correct, these two animals will provide an opportunity to compare movement patterns, home range size, and habitat use between an animal whose home range received fire treatment and another whose home range may not have received treatment. All traps were pulled from the upper area to redeploy in the central area, from Boulder Creek to 20 Mile Meadows. Lynx captured and marked in this area will provide an opportunity to assess how lynx move and use habitats that received extensive stand replacement fires, fragmented with "islands" of unburned habitat. Surveys to date indicate that lynx are occupying this region, but it will be important to mark lynx to determine movement patterns among the fragmented landscape. This will enable us to assess how the fire may influence travel patterns and habitat use, and to assess the potential affect of the fire on the status of lynx in the area.

**Superior Court Judge Decision Regarding the J. I. Storedahl & Sons Mining Plan:** On Thursday, February 15, 2007, Clark County Superior Court Judge John Nichols ruled against the J.L. Storedahl & Sons Company regarding its proposal to mine a new area of the Daybreak site located on the lower East Fork Lewis River near La Center, Washington. The court case arose from a 2005 decision by Clark County commissioners that denied rezoning of the Storedahl site to allow mining. The East Fork Lewis River supports native runs of fall Chinook, coho, & chum salmon and both winter & summer-run steelhead.

**Mountain Quail Mortalities:** Staff retrieved mountain quail carcasses from the pheasant farm at Coyote Ridge and submitted them to Washington State University for analysis. Approximately 80-90 percent of the original 200 have died. The birds were captured in Oregon last December and were scheduled for release in southeast Washington this spring. Initial findings indicate that the birds probably died of ulcerative enteritis (“quail disease”) caused by the bacterium *Clostridium colinum*. Once we have confirmed the diagnosis, options for the few remaining birds will be discussed.

**Puget Sound Shrimp Harvest Trends:** Crustacean staff from Regions 4 and 6 completed data entry of catch log data from Puget Sound commercial shrimp pot fishers during the 2006 season, then compared catch rates of spot shrimp to historical catch rates. During the 2006 season, the overall catch rate of spot shrimp in Puget Sound was 3.19 pounds per pot. This was 11% higher than the overall catch rate in 2005 and 67% higher than the catch rate during the 2002 season.

**Joint Oregon/Washington Sardine Industry Meeting:** IRM staff attended a meeting with the Oregon Department of Fish and Wildlife and sardine industry representatives from both states the end of January. The purpose of the meeting was to share information regarding our respective state sardine fishing regulations, with particular attention to the rules regarding the disposition of landed fish. Both Oregon and Washington have restrictions on the amount of sardines that could be landed for the purposes other than human consumption or fishing bait, commonly referred to as “reduction.” The California Department of Fish and Game also has rules restricting reduction of sardines. The comments from industry members were mixed; however, there appeared to be general agreement that a targeted reduction fishery in the Northwest was not favored. Everyone seemed to agree that the best course of action would be to discuss this issue at a federal level with representatives from all three states. To that end, Northwest industry members are planning to raise this topic at the next meeting of the Pacific Fishery Management Council’s Coastal Pelagic Species Advisory Subpanel. In the meantime, the Department is currently going through a full rulemaking process to consider changes to the sardine regulations for the 2007 season, but revisions to the reduction restriction are not part of the proposed rule package.

## **PUBLIC GOAL:**

### ***ENSURE SUSTAINABLE FISH AND WILDLIFE OPPORTUNITIES FOR SOCIAL AND ECONOMIC BENEFIT***

**Watchable Wildlife:** The Skagit Bald Eagle Festival was held February 1-4, 2007. Chuck Gibilisco developed an exhibit to promote the bald eagle background license plate. Chuck and Americorps interns Jassalyn Bradbury and Breanna Trygg staffed the exhibit, and handed out approximately 1,000 wildlife-themed license plate applications.

**Fir Island Stakeholders Update:** All comments on the quality hunt program and the enforcement presence on Fir Island during the snow goose season have been positive. There were concerns about the future funding for the quality hunt program and continued increased enforcement coverage. In addition to having Commissioner Solomon serving on the larger and more formal collaborative group, the Fir Island residents are being represented by two additional participants Curt Miller (Commissioner Solomon's husband) and Tom Ray.

**Enforcement Advisory Committee:** On February 3, 2007, Chief Bjork, Deputy Chief Jarmon, Captain Hebner and Officers Krenz and Rogers attended the second meeting of the Enforcement Advisory Committee at the Hyak Lodge. Group members have varied backgrounds and represent a number of different stakeholders. A substantial amount of background information is being provided. A committee Chair and Vice Chair were selected to represent the group and a committee Webpage has been established on the Enforcement Program's website. The Officers answered questions related to fish and wildlife enforcement. Areas of concern ranged from lack of enforcement staffing, tribal hunting issues, and information on the Region Three damage pilot. The committee seems enthusiastic about assisting to make a difference on enforcement-related issues.

**Good Fishermen Reported:** During a patrol of the upper Columbia River from Chief Joseph Dam to Pateros Officers checked steelhead fishermen and ESA protected species. While observing one boat near the tribal fish hatchery at Bridgeport, officers watched the fishermen land a legal hatchery fish. A few minutes later, they hooked into another fish. As the fish came up along the boat the men saw that it was a wild fish and followed the regulations exactly by not touching the body of the fish or removing it from the water. A hook remover was used to release the fish unharmed.

**Lost Falcon Returned in Region 4:** WDFW Officers assisted British Columbia Conservation Officers in the return of a Gyrfalcon to a Washington Licensed Falconer who had lost the bird.

**Clam Poacher Pleads Guilty to Felony Charges:** A WDFW Sergeant met with the Mason County Superior Court Prosecutor on an important case. The arrested subject was poaching clams on a Department of Health (DOH) closed beach due to pollution in the Mason County area. The subject was in U&A while harvesting on this closed and polluted beach. He had nearly 500 lbs. in his possession at the time of arrest. The prosecutor advised our Sergeant that the subject had already pled guilty to the felony charges. Upon advisement the Squaxin enforcement chief stated that the Tribe would now go forth with their prosecution of the subject.

**Bald Eagle Found Shot:** A WDFW Officer recovered an injured immature bald eagle from the Omdahl Road in Region 4. The eagle was taken to Fidalgo Animal Medical Center in Anacortes where x-rays revealed what appeared to be portions of a fragmented bullet in the joint of the right wing. The eagle was put down. No current suspects.

**Elk/Auto Accident on Highway 410:** Officers responded to a call from State Patrol troopers in the Greenwater area regarding an injured elk. The elk was a small 5 pt. bull that had a long length of rope entangled in his antlers as well as a five foot length of 4 inch PVC pipe stuck on the terminal points of one branch. The bull had jumped up on Highway 410 and was bucking in an attempt to rid himself of the unwelcome ornaments according to the driver of the vehicle that hit him. The elk died of the injuries and was donated to the Snoqualmie Tribe.

**Cougar/Bobcat Issues:**

- 1) Region 4 Officers were called to respond to a bobcat in a chicken coop. Upon arrival, the cat was still in the coop surrounded by dead chickens. The cat was dispatched.
- 2) Officers responded to a report of two cougars that had killed a pigmy goat and a chicken in the Sequim area. The first cat had been found dead in the woods near the Reporting Party's (R/P's) barn. Apparently, it was shot by the R/P while in the act of raiding her chicken yard. The young cougar had already killed one of the R/P's goats. A neighbor shot the second cougar. According to the neighbor, the cat was stalking his livestock. The entire incident was published in the Peninsula Daily News. Officers recorded two other cougar sightings on the lower Dungeness River near Sequim.
- 3) Officers responded to a report of a pet killed by a cougar near the Mason/Grays Harbor county line on the Cloquallum Road. Upon deploying hounds with two handlers, no strikes were generated. The hounds were worked at the exact location of the reported attack and kill in a field behind the reporting party's home. There was no blood, hair, etc. at the location given.
- 4) Officers responded to a call about a small cougar kitten in a barn south of Walla Walla. The Officers responded and located a 2-3 month old kitten, capturing it alive. The kitten went to a rehabilitator in Walla Walla and will be sent to a zoo in the near future. An article with photographs made the front page of the Walla Walla Union-Bulletin newspaper.



**Officers Assist in Emergency:** Officers assisted Chelan County Sheriff's Deputies with a 911 call in First Creek. The patrol cars could not respond due to deep snow. Our WDFW Officers and two deputies contacted the resident, and then used the WDFW vehicle to recover the two Crown Victoria patrol cars from a snow bank.

**Problem Bears Trapped:** Officers responded to an ongoing bear (sow and cub) problem north of Enumclaw. They set two traps and caught both. Once the bears were captured, the Officers discovered that the sow had a broken jaw and a broken forearm due to an old wound, likely from a gunshot. She had been surviving by placing food in the far corner of her mouth with her remaining healthy front paw and then trying to chew the food with the back molars, severely injuring her tongue. She had survived in this condition for the past three months but was in very poor condition. After further examination at the PAWS wildlife rehab center, a decision was made to put her down. The cub remains at PAWS. KOMO TV news covered the story.

**Grizzly Bear Investigation:** Three men decided to play a prank that backfired. They called a taxidermist in eastern Washington and asked if he could mount a grizzly bear. The suspects told the taxidermist they killed one near Concrete on Highway 20. The taxidermist told them "no" in no uncertain terms, used the "star 69 feature" and provided Fish and Wildlife Officers with the caller's identification. The analysis of the caller's records led to additional contacts, including one with a meat cutter. The meat cutter had received a phone call from the suspect, asking to cut and wrap a grizzly bear. The suspect was again turned down. A superior court judge agreed that probable cause had been established and issued a warrant. In serving the warrant the Officers discovered the whole story was a joke; however, while the main suspect had cooked the whole thing up with two buddies to see what would happen, he forgot he and his friends had poached a 5 x 5 blacktail deer earlier in the year. Evidence of that kill was discovered, statements taken, and a follow up investigation launched. So instead of yielding a grizzly bear killer, the Officers have a trophy deer poacher.

**Invasive Tunicate Talk:** Staff participated in the Washington Sea Grant sponsored 15<sup>th</sup> Conference for Shellfish Growers in Shelton, WA on March 5-6, 2007, by giving a talk on a non-native invasive tunicate (sea squirt) that was first reported in southern Hood Canal by the WDFW Subtidal Shellfish Dive Team. This particular tunicate, *Ciona savignyi*, is one of several highly invasive tunicates found in Washington and there is much concern over the signs of degradation of Puget Sound indicated by establishing invasives and the direct impacts to water-related industries like shellfish aquaculture and shellfisheries. Invasive species, like these tunicates, may become problematic because they can form dense aggregations and out compete native species for food and space.

**Commission Approves Clam and Oyster Season Changes:** Recommended clam and oyster season changes for 2007 at nine public beaches were approved by the Fish & Wildlife Commission. Of the eight clam season changes, five resulted in longer seasons than last year, while shorter seasons were approved on three beaches. Of the three clam season changes, two resulted in longer seasons than last year, while a shorter season was approved at one beach (Fort Flagler State Park). The agency web site and Shellfish Rule Change hotline were updated with information on the approved season changes.

**Shellfish Import Advisory Committee:** The WDFW Shellfish Import Advisory Committee, and representatives from the U.S. Department of Agriculture and the shellfish aquaculture industry, met on February 14, 2007, in Olympia. The main topic of discussion was the distribution of Denman Island Disease (DID) in Washington Pacific oyster populations. Aquaculture industry representatives at the meeting raised concern that the particular survey of DID in northern Hood Canal, near two shellfish hatcheries, would negatively impact their industry and communities where aquaculture occurs.

The WDFW monitoring and surveillance of DID in 2006 has shown that the disease does occur in the northern Hood Canal, making all of Puget Sound marine waters an endemic area for the oyster disease. It was suggested by at least one advisor that the industry should take management steps in the hatchery to reduce risk of introducing DID to hatchery systems. Another related development in 2006 was an action by the European Union (EU) to downgrade DID disease as a reportable disease. However, it is still up to individual countries to decide whether or not to import shellfish from Washington, due to the presence of the disease.

As a result of the EU action, observed low rates of infection in WA oyster stocks, and an endemic distribution in WA, department staff are developing a proposal to downgrade the disease, to a WDFW “Class B” shellfish disease, and remove the WAC language that establishes DID restricted areas. Doing this will remove perceived stigma that restricted areas may have, however, it will put more responsibility on the shoulders of the shellfish industry to show importers of their products that their animals are disease free and that hatcheries are well-managed to reduce disease risks. The department will continue to work with the tribes and the shellfish industry resolve DID “load” in relic oyster populations where the disease has tested positive.

**Liberty Bay Olympia Oyster Project:** Puget Sound Restoration Fund and our agency signed an extension of our Joint Memorandum of Agreement on Liberty Bay. The MOA sets aside 24 acres of agency-owned tidelands in Liberty Bay for a joint Olympia oyster restoration project. Cooperators in the project include the Suquamish Tribe, NOAA, and the U.S. Navy. The on-going project places Pacific oyster shell on the muddy tidelands, increasing the setting substrate for naturally-spawned native Olympia oysters. Thanks to the MOA extension, PSRF will receive grant funds from the Wildlife Habitat Incentives Program (WHIP). This program, administered by the U.S. Department of Agriculture, provides cost-share assistance for habitat improvements on private or government-owned land. The signed extension of this MOA effectively removed the last remaining barrier to added funding for this project. WHIP has now allocated \$28,500 to the Liberty Bay project, which represents 75% of the cost of buying, transporting and spreading 1,000 cubic yards of oyster shell.

**Intertribal Management:** Staff met with Hood Canal tribes, their attorneys, state Attorneys General and IRM to discuss an ongoing dispute between the Skokomish Tribe and other tribes with U&A’s in Hood Canal. The dispute has delayed the signing of the new Region 8 (Hood Canal) Bivalve Plan. The Skokomish Tribe seeks new language in the Plan giving them specific “management authority” on all public tidelands south of Ayock Point, despite the fact that other tribes have U&A’s within this area. While the immediate dispute centers on the Bivalve Plan language, the controversy has obvious implications for crab, shrimp and geoduck Plans within Hood Canal. Attorneys for the tribes and state plan to meet again next week to hammer out waiver language that will work for all parties and all shellfish plans in Hood Canal.

**Trout Hatcheries Provide Big Bang for the Buck:** A newly-released study of the 11 primary national rainbow-trout hatcheries in the United States shows that in Fiscal Year (FY) 2004 the facilities put out 9.4 million trout, attracting almost four million angler-days of effort and fueling a major contribution to the U.S. economy.

According to the study by U.S. Fish and Wildlife Service economist Dr. James Caudill, anglers spent \$172.7 million to pursue the pastime, in things such as fuel, lodging, food, bait and rods, reels and tackle. All of that says the study, provided employment for 3,502 people with a total income of \$80 million. In turn, that income put more than \$13 million into government coffers in income tax, \$2.9 million of it is state income taxes and \$10.6 million in federal income taxes.

All told, says Caudill, when you apply the multiplier effect to estimate the overall economic benefit from the hatcheries, their total economic impact for the year was likely somewhere just over \$325 million. Sales and motor fuel taxes totaled \$9.9 million alone, with the net economic value of a day's fishing calculated at \$48 for U.S. residents and \$69 a day for non-residents.

Caudill says that in FY2004 taxpayers shelled out just \$5.4 million, which the government put into rainbow-trout hatchery budget line items. That works out at just a little over 50 cents for every rainbow trout produced from the 11 facilities, says Caudill, so every \$1 of hatchery budget spent on the fish generated \$32.20 of retail sales, plus a further \$36.88 of net economic value.

Craig Springer, a fish biologist with the USFWS in Washington State, said that the study was one of only about three that he recalls being done over the years into the value of fish enhancement programs. He added that it provides valuable information to decision-makers regarding the usefulness of hatcheries and nursery facilities. (Northern Aquaculture, November/December 2006)

**Salmon Recovery and Flood Damage 2006:** In the fall of 2000/2001 a new intake pump station was constructed at Kalama Falls Hatchery with FEMA money from the flood of 1996. This intake was moved to a higher location out of the 100-year flood zone and is state of the art; equipped with ESA compliant screens and a self-cleaning air blow off system.

Between the 1<sup>st</sup> and 10<sup>th</sup> of November 2006, over 12.5 inches of rain was recorded at the hatchery and the river once again rose beyond flood stage. This new intake was put to the test and the water level reached to within one foot of flowing over the top. The intake worked flawlessly and it appeared the hatchery had escaped the wrath of Mother Nature.

In January, the water finally cleared on the Kalama River and revealed that the intake had not totally escaped the fall flood. There were no structural damages but a large amount of sand had been left behind. This was not your typical sand box pile of sand. The river had deposited an estimated 300 cubic yards of sand in the pump chamber. If the 30 dump truck loads of sand are not removed the river will bypass the pump station when the river level drops.

With shovels in hand the hatchery staff and crew are determined to keep the water flowing until the sand can be removed. The Kalama Falls Hatchery is key to the salmon recovery efforts in the Lower Columbia River. The Kalama Hatchery produces five (5) million fall Chinook, 500,000 spring Chinook, 700,000 coho and 90,000 summer and winter steelhead annually. It appears that even the best engineering cannot always escape what Mother Nature has in store.

**Wenas Lake Public Access:** Wenas Lake is a small irrigation storage reservoir (operational range of 60 - 140 surface acres) owned by the Wenas Irrigation District (WID). The lake is located in the upper Wenas Creek valley about 13 miles NNW of the City of Selah in Yakima County. The lake is formed by an 86-foot high earthen dam on Wenas Creek that stores water from October 16 - March 31 each year. In the late 1970's, WA Dept. of Ecology (DOE) and the U.S. Army Corps of Engineers found serious public safety problems and condemned the dam forcing the WID to construct a new dam or face loss of their irrigation storage reservoir. WID sought and received substantial public funding to construct a new dam through DOE's Water Supply Facilities Program (Referendum Bill No. 38). The \$2 million dollar construction was funded with a \$1.15 million Referendum 38 non-reimbursable grant and with a \$.85 million low cost, long-term loan (first 10 years interest free, remaining 20 years at 5.25% interest rate). The effect of the public financing was to keep the annual assessment cost to the water users unchanged from pre-construction levels.

In return for public financing of the dam reconstruction, the Department of Game negotiated a 25-year land use agreement with WID to provide property for a free public fishing access site. \$27,000 of the Referendum 38 grant was reserved to pay for development of the site including the access road, parking area, toilets and a concrete boat ramp. The land use agreement also provided the public with bank fishing access along the south shore of the reservoir from the parking area to the dam. The agreement was in effect from January 1, 1982 thru December 31, 2006. WDFW Region 3 Lands Division and Fish Program staff has been in contact with WID since August 2005 in attempt to renegotiate renewal of the land use agreement. The WID Board of Directors informed WDFW by letter dated February 5, 2007, that they had unanimously decided not to renew the agreement and to evict WDFW and the public from using the lake for fishing. Wenas Lake is a very popular lowland trout lake close to the Yakima/Selah urban area. WDFW stocks between 20,000 - 23,000 catchable rainbow trout a year plus another 500-600 large triploid rainbows. This year-round lake provides 6000-7000 angler trips per year. The Naches High School Football Booster Club holds a very popular and lucrative fundraising fishing derby on "Free Fishing Weekend" each year. The permit for the 2007 derby has been issued, but will now have to be modified to relocate to a different lake. WDFW will not stock state-funded fish production in a lake without any public fishing access. The Department has stocked Wenas Lake with trout annually since 1941.

**Columbia River Fisheries:** The commercial sturgeon fishery ended on February 23, 2007, with a total of 1,424 sturgeon and 194 spring chinook landed. Commercial smelt landings increased this week with 1,660 pounds landed in the mainstem Columbia River and 1,060 landed in the Cowlitz River. Prices paid to fishers remained high at \$10.50/pound for chinook, \$2.50/pound for sturgeon, and \$4/pound for smelt. The Cowlitz River was open on Saturday for sport smelt dipping with a fair amount of effort, but not much catch.

The first spring chinook test fishery occurred on February 25, with four contracted commercial fishers. A Compact hearing was held on February 26 to consider a commercial salmon fishery on Tuesday. Based on the fairly low abundance expected at this time of year and the above average catch of upriver-bound spring chinook in the sturgeon fishery, most of the commercial fishers testified that they would prefer to wait until more spring chinook are available.

**North Pacific Fishery Management Council:** The North Pacific Fishery Management Council met the week of February 5-13. Major items on the agenda included the following:

Management of the recreational charter fishery for halibut in Alaska – The Council preliminarily approved plans to implement a license moratorium program for the charter fleet in southeast and south-central Alaska and is on track for final approval at the next meeting. This measure is strongly supported by the charter industry.

Vessel Monitoring System (VMS) requirements – The U.S. Coast Guard and the enforcement arm of the National Marine Fisheries Service have been urging the Council to adopt a comprehensive VMS requirement for vessels participating in federal fisheries in Alaska. A significant portion of the fleet, including virtually all of the fleet that are homeported in the lower 48, are already subject to VMS requirements. The southeast Alaska small boat fleet, and many Washington trollers and gillnetters, are opposed to being included in the requirements. The Council was considering a recommendation that would have exempted salmon boats, but instead decided to shelve the proposal until other alternatives could be more fully investigated.

Bering Sea crab rationalization – The Council discussed current problems with the rationalization program, such as the impact of the Stellar Sea breakdown on crab processing in the Pribilofs, lack of processing capacity in the western Aleutians, claims of job loss with vessel consolidation, and the price structure. Many of these issues will be initially examined in the 18-month review of the program that the Council plans. There continues to be widespread dissatisfaction among independent harvesters about processor arrangements in the program, but much of it is anecdotal.

Bering Sea Essential Fish Habitat (EFH) – The Council is attempting to finish its action of establishing EFH in the Bering Sea by considering mitigative factors for the effect of bottom trawling on the benthic communities. One aspect is modification of trawl gear, using recent research on the beneficial effects of disks and sweeps at reducing the “footprint” of trawl contact on the bottom. In muddy areas where all of the benthic fauna are relatively flexible, such as sea whips and sponges, which characterizes most of the Bering Sea, gear modification can provide a significant ecosystem benefit. The Council is considering that as one option. Another option is to close areas that have not been trawled, as well as areas that have significant importance to crab, skate, or herring production, or where trawling might conflict with small boat fishing by coastal communities. Defining these area continues to be problematic; at each meeting the Council changes its definition of area to remain open for purposes of analysis of the option and so action to finish EFH continues to be delayed.

**Geoduck Management:** IRM and Department of Natural Resources staff met with tribal staff from the Central Puget Sound and Eastern Strait of Juan de Fuca geoduck management regions on January 29, 2007, to initiate commercial harvest planning discussions for the 2007-08 season. The parties agreed to extend the time period to take geoduck shares if biotoxin closures (PSP) preclude harvest for extended periods of time. Other topics included total allowable catch, protections for finfish spawning sites, harvest locations, post-harvest surveys, and the possibility of multi-year plans. State and tribal representatives continue to work together to develop geoduck harvest management plans for Hood Canal and North Puget Sound.

**Ringold Hatchery Cormorant Control:** On January 16, 2007, Ringold Springs Rearing Facility (RSRF) staff reported that they were experiencing significant predation of steelhead caused by the sudden arrival of a large flock of double-crested cormorants. These birds may have relocated to the Hanford Reach (Columbia River) because of ice cover on lakes in the Columbia Basin where they normally reside. Up to 50 birds were working the five-acre rearing pond, which contained approximately 370,000 Wells-stock hatchery steelhead pre-smolts, which are listed under the ESA. This production supports the lower Hanford Reach steelhead fishery that runs annually from October through March. By January 17, the number of birds had increased to 200+, with 20-30 on the water at any time and the remainder flying around the pond looking for access through the monofilament line strung above the pond to provide fish protection. Hatchery staff was assigned to haze birds from daylight to dusk using pyrotechnics (fire crackers, bottle rockets, etc.). Several thousand rounds were used between January 17 to 23, 2007, with limited success (3,000 rounds on January 19 alone). On January 18, the RFPM requested and received Fish Program approval to request an emergency modification to the U.S. Dept. of Agriculture-Wildlife Services (USDA-WS) "take permit" issued by the U.S. Fish & Wildlife Service, who administers the "Migratory Bird Act". This modification allows USDA-WS staff to control bird predation at Ringold, on WDFW's behalf, by lethal removal of up to 50 cormorants. The permit was received by USDA-WS on January 23 and the first lethal removals (10-15 birds) took place on January 24, a week after the problem was first reported. Presently, predation has abated as a result of the January 24 effort, but USDA-WS is prepared to return at intervals, as needed, to provide additional protection for the fish. Hatchery staff is developing plans to seek emergency funding to construct over-head bird netting to provide 100 percent protection by denying bird access to the pond, thus eliminating the need for lethal removal.

## **FUNDING GOAL:**

### ***ENSURE EFFECTIVE USE OF CURRENT AND FUTURE FINANCIAL RESOURCES IN ORDER TO MEET THE NEEDS OF WASHINGTON STATE'S FISH AND WILDLIFE RESOURCE FOR THE BENEFIT OF THE PUBLIC***

**Federal Landowner Incentives Program in Jeopardy:** The federally funded Landowner Incentive Program (LIP) is in jeopardy, since both congress and the federal administration have eliminated the program from their 2008 budgets. In Washington State, LIP has proven to be a very successful and popular program. LIP funding has provided over \$3 million in competitive grants to over 150 private landowners for the protection and/or restoration of habitat to benefit species at risk on privately owned lands. Since over half of Washington State is in private ownership, preservation of the state's rich fish and wildlife heritage is largely dependent on the ability of private landowners to provide habitat for species at risk. Staff will be working with the Washington State Congressional Delegation to try to save LIP, or at least reserve funding for some type of private landowner program in the future.

**Coweeman River Fall Chinook Research Project Receives External Funding:** A cooperative research project between Washington Department of Fish and Wildlife's (WDFW) Fish Program, Science Division and Region 5 has just been approved for funding by the Pacific Salmon Commission's Southern Fund Committee. Biologists Cameron Sharpe (Science) and Bryce Glaser (Region 5) will receive \$192,589 over two years to estimate juvenile production and adult escapement of Coweeman River (SW Washington) fall Chinook. This population is ESA-listed as threatened and consists of wild production only, which is rare in lower Columbia tributaries. Juvenile fish will be marked with a combination of strontium chloride and CWTs with the ultimate goal of estimating adult production from juveniles that emigrate as fry and as subyearling smolts. This work is quite important for two reasons. First, the Coweeman is a harvest management index stock for over 20 other fall Chinook stocks in the lower Columbia. Second, it will allow us to estimate the relative juvenile to adult survival of fish that outmigrate as newly emergent fry, a Chinook life history that is very common in many streams.

**Pacific Salmon Commission Chinook Research Proposals Submitted:** On January 25, 2007, staff from the Fish Science and Management Divisions submitted eight (8) research proposals, requesting \$840,125 for 2007, for the Pacific Salmon Commission's (PSC) Chinook Technical Committee (CTC). Research project topics include studies to: estimate Chinook gillnet drop rates in the Columbia River, test DIDSON sonar technology for estimating Coweeman Chinook escapement, provide a comprehensive comparison of redd-based escapement estimates against independent estimates, develop a sampling and modeling framework for incorporating genetic stock identification (GSI) and coded-wire tag (CWT) fishery data into a new coast-wide Chinook harvest model, GSI sample and analyze Chinook bycatch in area 7/7A sockeye fisheries, GSI sample and analyze area one (1) troll and sport landed catch, develop new genetic markers to improve accuracy of GSI estimates, and compare GSI and CWT stock composition estimates for fisheries ranging from Alaska to Oregon in order to test the indicator stock assumption. Project selection by the CTC will occur during the February 12-16 PSC annual meeting.

## COMPETENCE GOAL:

### *IMPLEMENT PROCESSES THAT PRODUCE SOUND AND PROFESSIONAL DECISIONS, CULTIVATE PUBLIC INVOLVEMENT AND BUILD PUBLIC CONFIDENCE AND AGENCY CREDIBILITY*

**Rock Creek Landslide – Emergency Declared:** Staff continues work with Skamania County where they responded to an emergency declared by the Commissioners associated with the Rock Creek landslide. Some reports indicate this slide has up to 8 million cubic yards of material that is currently moving slowly towards and down the creek. The emergent concern centers on the potential impact to bridges (with utilities such as sewer, water and electricity located on them) that are downstream. There is fear a large amount of slide material entering the stream in a single event could create a dam. The potential effect of a subsequent dam break would be devastating. An emergency verbal Hydraulic Project Approval has been issued for removal of streambed material to help create additional capacity for water and sediments moving through the system.

**Wild Horse Coordinated Resource Management Plan (CRM):** Edd Bracken and Cindi Confer prepared a grazing plan that details 2007 and 2008 livestock grazing in two pastures on the Whiskey Dick Wildlife Area. The grazing plan was developed with input from a subcommittee of the CRM group, and was reviewed at the February meeting. The CRM group decided to use the WDFW grazing plan format as a model to develop a grazing plan for the entire CRM area. House Bill 1889 promises much needed funding to implement the CRM. The bill, sponsored by Representative Don Barlow from the 6th District, should get a hearing soon.

**WDFW Hosts Law Enforcement Meeting:** Region Six detachments along with the Mason County Sheriff's Office (MCSO) coordinated the first ever Mason County Law Enforcement Breakfast in Shelton. There were over 50 participants at this new monthly meeting. The first training will involve a "Haste Response" plan. This operational system is to address the all too often seen "shooter" at a school or other crowded facility. Training will take place at the abandoned Hood Canal School. All members of WDFW's Detachment 7 (Mason County) attended the meeting. Other law enforcement agencies in attendance included: Department of Natural Resources, U.S. Forest Service, State Parks, National Parks, State Patrol, Shelton Police, and Skokomish Police. In addition, retired law enforcement officers were included. The next scheduled meeting is Friday, March 30, 2007 at the Little Creek Casino. Meetings will be on the last Friday of each month. The location will change monthly to allow other communities within Mason County to participate.

**Injured Eagle:** The hatchery staff at Sol Duc discovered an injured Bald Eagle at the Bear Springs trout-rearing channel standing on the netting and picking off the unsuspecting trout swimming by; it appeared that he was unable to fly but could hop a good three feet at a time. A WDFW Officer was contacted and arrived at the hatchery within the hour with two large salmon nets. The eagle, which *did* fly a short distance, but with the Officer chasing him with nets in hand, it soon became apparent that one would not want to get in a foot race with the Officer. He gently placed the net over the bird and wrapped a towel over it for stress control and safety issues. While unraveling the net from the eagle's talons, it is easy to realize why they are able to fly off with prey. The eagle was transported to the Sequim Raptor Center for diagnosis of a possible gunshot wound to the body cavity.

**Quick Action by Hatchery Staff Holds Down Fish Loss During Power Outage:** Staff at Eastbank Hatchery rigged emergency pumps and water lines to get fresh water flowing to and to minimize loss of, tiny steelhead, sockeye and Chinook salmon on Sunday January 7, 2007 after power went out to the Chelan County PUD's Eastbank Hatchery.

Approximately seven percent of the summer/fall Chinook and 9.8 percent of the steelhead at the hatchery were lost. That amounts to 68,965 Chinook out of 982,125, and 22,202 steelhead out of 226,045 that were in the hatchery raceways.

About 64,000 of the summer/fall Chinook sub yearling fish were intended for release in the Wenatchee River program this spring, and another 3,892 were intended for release in the Methow River. Steelhead raised at the hatchery are released in the Wenatchee River Basin.

As described by PUD Director of Fish and Wildlife, Shaun Seaman, The Washington Department of Fish and Wildlife (WDFW) personnel, who operate the hatchery under a contract with the PUD, noticed that power supply was beginning to fluctuate about midday on Sunday to the hatchery situated on the eastern side of Rocky Reach Dam. That is when high winds were buffeting the Chelan County area, knocking out power to thousands of homes and businesses and sending roofs flying and trees crashing. When power to the pumps was lost early in the afternoon, WDFW staff managed to rig emergency gas-powered pumps and temporary water lines to keep fresh water flowing to fry & eggs in incubation trays. This saved fish that will be released in 2008.

Seaman stated, "Actions by WDFW staff and District crews were instrumental in maintaining a high-level of survival for these programs at the Eastbank Hatchery."

**Aircraft Safety Document:** Point Whitney bivalve project staff collaborated with other Fish Program personnel to write an Aircraft Safety Standard Operating Procedures (SOP) document. The document sets standards for aircraft vendor selection, flight documentation, preflight planning, safety equipment requirements, and operational safety protocols. The document will be finalized and implemented in time for aerial surveys of public beaches that we will be conducting this summer. Staff also finalized the flight schedule for the 2007 season, with 51 flights planned between March 7 and September 11.

**Meeting with Commercial Shrimp Advisers:** Shrimp managers from Regions 4 and 6 and Rich Childers, Shellfish Policy Coordinator, met with Puget Sound commercial shrimp advisers to discuss: 1) The harvest summary from the 2006 season; 2) Problems that occurred in monitoring the commercial fishery during the 2006 season; 3) Problems with catch logs; 4) Maps that were developed showing the distribution and catch-per-unit-effort for spot shrimp catch, based on catch logs; and 5) Changes for the 2007 season. Changes for the 2007 season include: A one-inch mesh size restriction for fishers who are targeting spot shrimp, to reduce the handling mortality of juvenile spot shrimp; proposed quota increases in three catch areas; and a proposal to extend the trawl fishery in Region 3 from the present closure date of October 15, to October 31. A request to extend the State trawl fishery in Region 3 has been received from industry for each of the three previous years, and state/tribal shrimp managers have agreed to extend based on sampling of shrimp catches.

**Olympic Coast National Marine Sanctuary (OCNMS) Intergovernmental Policy Council:**

At the request of the four coastal treaty tribes, the OCNMS Intergovernmental Policy Council was formed through a Memorandum of Agreement with the National Marine Sanctuary Program, the Makah, Quileute, and Hoh Tribes, the Quinault Indian Nation, and the Governor's Office on January 30, 2007. The purpose of the Intergovernmental Policy Council is to provide a forum for communication, exchange of information, and development of policy recommendations for management of marine resources within the sanctuary boundaries.

IRM staff participated in a conference call of the OCNMS Intergovernmental Policy Council on February 23, 2007. The purposes of the call were to provide the list of representatives from each tribe and agency, determine how often the policy council should meet, and how the policy council would interact with the Governor's Ocean Policy Working Group. The tribes, collectively, agreed to have formal appointments to the Intergovernmental Policy Council through resolutions adopted through their respective Tribal Councils. Each tribe will submit the resolutions and/or letters of appointment before the next meeting, scheduled for March 13, 2007. The policy council decided to schedule meetings – one per month – for the next three months. It is anticipated that following these initial meetings, the policy council will likely only need to meet every other month.

Kathleen Drew, Governor's Office representative, indicated that the state would be represented through a team approach that would include representatives from the Departments of Fish and Wildlife, Ecology, Natural Resources, and Parks and Recreation. State representatives would be invited to participate according to the topics on the agenda. Ms. Drew would represent the state, and in her absence, Phil Anderson would be her alternate. Ms. Drew also explained that the Legislature was considering legislation that would formalize the Ocean Policy Working Group and make it a group under the Governor's Executive Policy Office. It is unclear whether this bill will pass. However, even if the bill does not pass, the Governor's Office was supportive of continuing an Ocean Policy Working Group that would include representatives from the state agencies listed above, as well as other state and local agencies and stakeholders. Ms. Drew envisioned that she could share the topics that the Ocean Policy Working Group were discussing with the OCNMS Intergovernmental Policy Council to solicit the Council's input and share information. Everyone seemed agreeable with this approach. The next Intergovernmental Policy Council meetings are tentatively scheduled for March 13, April 25, and May 30.

**Columbia River Water Management Program (CRWMP) Implementation Team:** At the last meeting of this team, February 20, topics under discussion included finalization of a mission statement, continued discussion about funding criteria for projects funded through the program account, logistics with respect to creating the funding program, pulling together a technical advisory group (TAG) to review projects, establishing a cycle for project proposals, and further details regarding program implementation mechanisms.

WDFW will lead development of a joint list of fish-critical stream reaches with tribes and others that will help set priorities for conservation projects and new water acquisitions. Much of this information is currently available, but consensus among fish advocates within the CRWMP process is needed. WDFW is also following up to ensure WDFW maintains a role in reviewing projects and expenditures that do not fall under the TAG-reviewed "conservation project" category. Ecology is planning a Columbia River Water Summit in June. The Governor will address the summit and WDFW, tribes, federal and local governments, and others will give presentations or participate in panel discussions.

**Coastal Groundfish Fisheries:** IRM staff attended the Pacific Fishery Management Council's Groundfish Management Team the last week of January 2007. The primary purpose of the meeting was to review the latest complement of West Coast Groundfish Observer Program data for the commercial trawl and fixed gear fisheries. The bottom trawl bycatch rates for canary rockfish, in particular, increased in 2005 from previous years in the area shoreward of the trawl rockfish conservation area (i.e., between the shore and 75 fathoms). National Marine Fisheries Service staff plotted the bycatch rates by region, and developed alternatives that close areas with higher rates to reduce canary rockfish bycatch. The area with the highest canary bycatch rate is the area north of Cape Alava to the U.S./Canada border. All of the alternatives, except one, propose closing this area from the shore to 200 fathoms year-round. Other alternatives include closing additional areas, including from Leadbetter Point to the Columbia River. As the area north of Cape Alava is an important groundfish fishing area to Washington-based trawlers, the Department has scheduled a meeting with Washington trawl industry representatives to review these alternatives and develop other options. The Pacific Council will consider these alternatives for in-season action at its March meeting. If adopted, restrictions will likely be in place beginning May 1, 2007.

## SCIENCE GOAL:

### *PROMOTE DEVELOPMENT AND RESPONSIBLE USE OF SOUND AND OBJECTIVE SCIENCE TO INFORM DECISION-MAKING*

**Avian Influenza Summary:** From July 14, 2006 to February 07, 2007, the Washington Department of Fish and Wildlife submitted 788 live surveillance swabs, 736 hunter-harvested swabs, 150 fecal samples, and 60 morbidity/mortality swabs for avian influenza (AI) testing. Swabs were collected from 20 avian species throughout the state of Washington. In addition, 54 avian carcasses have been submitted for post-mortem examinations. As of February 07, 2007, lab results for 982 swab samples have been received. To date, 7 samples from mallard ducks have tested positive for an H5 strain of AI virus. There have not been any virus isolations of H7 or N1 subtypes of AI virus to date. The National Wildlife Health Center has reported that an additional 23 Mallards, 5 Cackling Geese, 1 Dunlin, and 1 Western Sandpiper have tested positive for AI viruses that were not of the H5, H7, or N1 subtypes.

**Zebra Mussel Enforcement Plan:** Enforcement's Aquatic Invasive Species (AIS) Officer traveled to Las Vegas to attend the 100<sup>th</sup> Meridian Team Workshop. In light of Zebra Mussels being discovered in Nevada, several western states are now trying to "catch up" in the prevention and enforcement of AIS regulations. They may look to WDFW for guidance in forming an enforcement plan.

**Briefing of Mineral Prospectors on Similkameen River Freshwater Mussel Study:** Staff provided edits on the draft report on the results of the study of impacts of suction dredging on freshwater mussels in the Similkameen River, and participated in the presentation of the result of the study to representatives of the mineral prospecting community, including those who assisted us with the study. The study revealed no short-term impact on two species of freshwater mussels when passed through a 4-inch suction dredge, but that mussels experienced some mortality when buried under simulated dredge tailing piles.

**Geoduck Clam Fertilization Experiment:** As part of a Sea Grant funded study, Central Shellfish staff participated in a one-day study trial at the Taylor Shellfish hatchery facility in Dabob Bay. The overall study grant involves University of Washington (UW), Taylor Resources, Inc., and WDFW staff and seeks to address cultured-wild interaction related to geoduck aquaculture in Washington State. As currently practiced, aquaculture of geoduck clams in Washington State involves dense aggregations of seed geoduck. These densities far exceed those observed in wildstock populations. If cultured stocks mature prior to harvest and are reproductively successful, they could negatively impact the genetic variability of local wildstock populations. The study trial involved testing an artificial geoduck spawn apparatus. Geoduck sperm and eggs were collected and pooled from hatchery stock. WDFW and UW divers then set up an *in situ* artificial geoduck spawning system on bottom of Dabob Bay. Geoduck sperm was delivered through an array of 50  $\mu$ m polyethylene bags containing eggs. The preliminary results indicated a 15-25% fertilization rate of geoduck eggs, establishing the efficacy of the study trial methods. Additional study trials are planned prior to the final fertilization study, scheduled for April 2007.

**Acquisition of ROV for Marine Invertebrate Assessment:** Shellfish dive fisheries staff is working with the Washington Department of Natural Resources (DNR) to acquire a remotely operated vehicle (ROV) to conduct certain marine benthic surveys. This assessment tool would be employed in areas inaccessible to scuba divers due to water depth, to survey large areas for presence/absence of certain invertebrate and algae species, to identify benthic surface substrates and habitats, and to identify signs of illegal harvest activity. With area quantification using triple beam lasers, this tool could be used for stock assessment of commercially important species such as sea cucumbers and possibly sea urchins. Important or sensitive habitat such as macroalgae and eelgrass beds can be surveyed and fishery management actions to reduce impacts to this habitat can be implemented.

**Burrowing Shrimp Workshop:** Bruce Kauffman and Dan Ayres attended the burrowing shrimp workshop held January 18 and 19, 2007, in Long Beach, WA. This workshop is held annually and is a venue for researchers to present to the oyster industry updates on progress towards completing an integrated pest management plan for burrowing shrimp. The industry has until 2012 to find an alternative to using carbaryl to control shrimp populations. Updates were given on burrowing shrimp biology, biological monitoring and mapping of shrimp populations and various control strategies (biological, mechanical and chemical). Biological controls discussed were lugworms (did not work), isopods (which castrate the host and have greatly reduced the mud shrimp populations in Willapa Bay, but is problematic for ghost shrimp), and sturgeon (sturgeon eat ghost shrimp but we cannot document to what extent and if they would be effective in reducing populations). Mechanical control methods have not been effective in controlling shrimp although use of shock waves may be investigated. The search for an alternative chemical control method has resulted in one potential candidate, imidacloprid. This is a systemic, chloro-nicotinyl insecticide with soil, seed and foliar uses for the control of sucking insects including rice hoppers, aphids, thrips, whiteflies, termites, turf insects, soil insects and some beetles. The toxicity to fish is much less than carbaryl and the effect on non-target crustaceans is also lessened. The industry is at a point where it must soon decide if they wish to start the task of getting imidacloprid registered for aquatic use, a process that will likely take four to five years. After having carbaryl taken away from them for primarily political (not scientific) reasons the oyster industry would like some assurances from state agencies and those groups opposed to carbaryl use, that the same thing will not happen to imidacloprid after they spend hundreds of thousands of dollars for registration.

**The Steelhead Genetics Report for the Walla Walla, Lyons Ferry Hatchery and Tucannon River Stocks Will Be Finalized Within a Week:** Joe Bumgarner, Scott Blankenship, Mo Small and Glen Mendel have been working on this report for some time. It indicates significant genetic differences between Lyons Ferry Hatchery (LFH), Lower Grande Ronde tributaries, Walla Walla, Tucannon, and Touchet steelhead stocks, as well as possible hatchery (LFH) introgression (genetic mixing) into Tucannon steelhead. This document will be very helpful when WDFW goes through the Hatchery reform process, Statewide Steelhead Management Planning, and responding to Federal Salmon Recovery Planning this year. Regional staff is hoping to receive some help from the genetics unit for genetic analyses of Tenmile and Asotin steelhead this spring.

## **EMPLOYEE GOAL:**

***CREATE AN AGENCY ENVIRONMENT THAT NURTURES PROFESSIONALISM, ACCOUNTABILITY, ENTHUSIASM, AND DEDICATION IN ORDER TO ATTRACT, DEVELOP, AND RETAIN A WORKFORCE THAT CAN SUCCESSFULLY CARRY OUT THE MANDATE OF THE AGENCY.***

**Northwest Stream Restoration Design Symposium:** Two Technical Applications (TAPPS) Division biologists and several other WDFW staff attended the sixth annual Northwest Stream Restoration Design Symposium, February 6-8, 2007, in Stevenson, Washington. This conference focused on stream restoration questions of concern to project planners, designers, engineers, biologists, regulators, land managers or owners, and community stewards throughout the Pacific Northwest. Nearly 400 people attended the conference. Topics included fish passage, habitat restoration, structures and habitat, hydraulics, project monitoring and evaluation, large wood in streams, and dam removal. Presentations on some projects in which TAPPS staff were directly involved in were also included.

**Innovation in State Government Award Presented to Jody Taylor:** On February 7, 2007, in the Capitol Rotunda, Secretary of State Sam Reed presented Jody Taylor with a State Innovation Award. Jody is the Wenas Wildlife Area Assistant Manager in Region 3. He received the award for inventing an automated elk-feeding machine that reduces staffing costs, minimizes the risk of injury, and reduces waste while feeding elk. This new system saved WDFW over \$15,000 in just the first year. Jody has also invented a fence wire roller that saves time and reduces injuries. Great job Jody!

