

Presentation to AFE on February 2, 2009

[opening slide: Legacy]

Good afternoon, I am Craig Tillery and I am the Deputy Attorney General for the Alaska Department of Law. I have been involved with the Exxon Valdez oil spill almost from the day it occurred, first with the civil litigation and then for a period of time as the legal advisor to the state trustees on the Exxon Valdez Oil Spill Trustee Council, a joint federal and state organization charged with overseeing the expenditure of damage recoveries from the litigation. In addition, for sixteen years I served as the representative or alternate for the Department of Law on the Trustee Council.

There are certain events for which you remember where you were when you heard the news. Like many Alaskans, I can remember how, where and when I first learned of the Exxon Valdez oil spill and I recall my first reactions to the news: curiosity as to what this meant for Prince William Sound and interest in how the legal issues and inevitable litigation would play out. Mostly I had the reactions of a detached and curious, but uninformed observer. Within a short time I found myself in a helicopter landing in a cove on an island in Prince William Sound at the heart of the oil spill. What I saw, and heard, and smelled, I will never forget. The juxtaposition of the idyllic beauty of the Sound in which I had spent many weeks kayaking in previous years and the noisy smelly industrial scene in front of me was overwhelming. I remember two reactions at that time, sadness and anger. There was never again detachment or idle curiosity.

It is unfortunate that it takes a disaster of this magnitude to shake us from our complacency and make us see how greatly nature has blessed us here in Alaska and elsewhere in our great country; to understand how easily and quickly humans can despoil it; and to make us realize how much we depend on our natural world and how much havoc reckless acts can wreak with our lives and the lives of our families. It is important that we remember and learn from such events. It is in that spirit that I will present a history of that spill and the legal aftermath.

The Oil

[Map of Alaska] Alaska North Slope crude oil is produced along the northern coast of Alaska in various fields such as Prudhoe Bay and Kuparuk. The oil is a heavy crude, highly toxic and slow to disperse when released into the environment. **[pipeline, series of 2]** The North Slope crude oil is gathered in Prudhoe Bay and sent 800 miles through the Trans-Alaska Pipeline to the Alyeska Marine Terminal **[Terminal]** located in Valdez, Alaska. From there the oil is loaded on tankers **[Tankers, series of 2]** and shipped south through Prince William Sound. Most of the oil ends up in Washington, California or Texas **[west coast map]** where it is refined and distributed for use. For the first 12 years of operation this system, while not without problems, avoided disaster. To a large extent the shippers of the oil, citizens in the nearby communities and government regulators grew complacent. In the early morning hours of March 24, 1989 this complacency was shattered.

The Spill

On Thursday evening, March 23, 1989, the EXXON VALDEZ, a very large crude carrier and one of Exxon's then two largest oil tankers, left the Port of Valdez bound for Long Beach, California. The ship passed through the Valdez Narrows and the pilot disembarked. **[glacier, series of 3]** Captain Joe Hazelwood ordered the vessel to proceed outside of the normal traffic separation lanes in order to avoid ice which had calved from the Columbia Glacier and was reportedly near **[ice]** the shipping lanes. The Captain indicated to the mate where he wanted the vessel to turn to bring it back into the shipping lanes and then he left the bridge. The ship did not make the turn prescribed by the Captain and, shortly after midnight on Friday March 24, 1989, struck Bligh Reef and fetched up hard aground. **[grounded ship]** The grounding punctured the single-hulled vessel, resulting in the rupture of eleven of the vessel's crude oil tanks. **[damaged hull, series of 3]** As a result, over 11 million gallons of crude oil were released into the pristine environment of Prince William Sound. **[oil on water, series of 2]** It was the largest oil spill in United States history. **[map of oil spill]** To give you some perspective, if it had occurred on the East Coast, it would stretch from Cape Cod to Cape Hatteras. **[Map of spill on East Coast]**

Response

For almost three days, the weather in Prince William Sound was unusually quiet, allowing time to begin lightering the remaining oil to an empty tanker and to respond to the spill. **[lightering operation, series of 2]** The lightering effort took 11 days and was a success; the response was not. Alyeska Pipeline Company, the initial responder under the terms of the Prince William Sound contingency plan, was not ready and few pieces of

equipment were in the area in a timely manner. In the early evening of March 24, as the Governor flew to the grounded vessel, only two skimmers, both of which were full at the time, were motoring aimlessly around the growing oil slick. There was little or no containment boom deployed and what was in the water was of little help. A test burn was conducted, which worked to some extent, but the water content of the oily mousse soon made burning impractical or impossible. Although dispersants were a primary response tool, and were tested with somewhat inconclusive results, Exxon and Alyeska had neither sufficient dispersant nor equipment to adequately deploy it.

In any event, the weather soon put an end to any hope of containment. In the evening of March 26, Easter Sunday, a severe winter storm blew into Prince William Sound, with wind gusts up to 73 miles per hour. The oil slick quickly went from a relatively compact mass to a widely dispersed uncontrollable collection of patches and streaks. Oil began to hit the beaches at Smith, Seal and Naked Islands [**oiled on water and beaches, series of 7**] and stretched as far south as 40 miles from the site of the grounding. Response vessels were forced to run for shelter in the face of the storm. Whatever hope of containing the spill initially existed was now gone. The oil soon hit the beaches in hundreds of places, overwhelming any efforts to stop it, with a few notable exceptions.

One of the “stands” made against the oil became known as the “Battle of Sawmill Bay.” Frustrated by the lack of response activity, the state began to work with the local fishing fleets [**oiled fishing boats**] that had heretofore been kept out of any official role in the response. The fishermen quickly decided that protection of salmon hatcheries in the

Sound was the priority. Of the hatcheries potentially in the path of the spill, none was more vulnerable than the Koenig hatchery located in Sawmill Bay, near the village of Chenega. **[village]** With the help of state workers and local villagers, the fishermen began to string defenses in the bay using boom previously stored there as well as supplies brought in by boat and airdropped from helicopters. **[boom, series of 2]** Unfortunately the boom that was available was generally light duty or absorbent boom and the current in the area moved at a brisk 7 to 8 knots, faster than the rated performance of the boom. The workers began experimenting with different deployment techniques, using different combinations of equipment, unusual deployment angles and newly devised anchoring systems. Boom was continually replaced as it wore out, often connected with improvised parts from the nearby village. “Supersucker” vacuum trucks **[supersucker]** were driven down to Valdez from the North Slope, mounted onto barges, and used to suck the oil and the mousse from the water. Yet the bulk of the skimming operations were done by fishermen, locals and state workers using such sophisticated methods as scooping up floating oil in five gallon buckets. In the end the Sawmill Bay hatchery was saved through a collaborative effort of individuals and government, with most of the credit due to the persistence and ingenuity of fishermen and local residents.

Over the next five and a half months the cleanup operations grew exponentially, ultimately becoming the largest private project in Alaska since construction of the Trans-Alaska Pipeline. **[cleanup, series of 11]** At its high point over 11,000 people were working on cleanup. At times it looked like an invasion force had entered Prince William Sound. According to Exxon’s count over one thousand miles of beach were treated that

summer. As I described earlier, the result was that at times Prince William Sound beaches looked more like an industrial zone than a world class natural area. **[industrial cleanup scene, series of 2]**

Assessment

Perhaps the most perplexing problem in assessing the extent of environmental damage caused by the oil spill was that, with a few exceptions, there was little baseline information on the natural resources in the oil spill area. As the spill expanded some scientists raced to gather data ahead of its reach. However, the spill was too big and events moved too fast for this to suffice. Even where data existed, such as with salmon runs in the area, the natural variation in those resources made pre-spill and post spill comparisons suspect. Thus to document the extent of damages, one of the crudest measures, a body count, became a primary yardstick for describing the damage to the public. Following the spill, animal carcasses were found in large numbers, including approximately 21,000 murre, **[oiled birds, series of 6]** 1,100 marbled murrelets, 838 cormorants, 151 bald eagles, and 1,000 sea otters. **[oiled otter, series of 2]** However, this measure clearly understates the actual losses since animal carcasses sank or were never discovered in the huge area covered by the oil spill. For example, even though “only” about 21,000 murre carcasses were found, the estimated total loss, based on studies done at the time, was 250,000. This was about 40% of the pre-spill population of murre in the oil spill area.

In some cases no carcasses were found to even confirm an oiling injury. [**killer whales, series of 2**] For example, no oiled killer whale carcasses were found following the oil spill, but we know that 14 out of the 36 killer whales in the resident Prince William Sound pod disappeared in 1989 and 1990. During that same time period no whales were born in that pod.

Sublethal injuries to natural resources were even more subtle. For example, following the oil spill cutthroat trout in oiled streams grew more slowly than those in unoiled streams, possibly as a result of reduced food supplies or exposure to oil. [**cutthroat trout**] There is concern that reduced growth rates may have led to reduced survival. These differences persisted through 1991 when the last study was completed. In recent years we have learned more about the isolated nature of cutthroat trout populations, suggesting the possibility of other explanations for the differences. At this time recovery status of the cutthroat trout remains unknown.

An even more complex problem arose with pink salmon. Pink salmon in the Sound are both wild and hatchery raised. [**pink with researcher**] Seining for pinks is a major industry in Alaska, employing many people in coastal communities with otherwise limited employment opportunities. [**Seiners, series of 2**] Wild pink salmon spawn in intertidal areas as well as in streams. [**pink in stream**] These fish spawned in an oiled intertidal zone, swam through oiled waters and ingested oil particles and oiled prey as they foraged in the Sound and emigrated to the sea. As a result, post spill studies indicated two types of injury. First, growth rates in juvenile salmon from oiled areas of

Prince William Sound were reduced. Second, there was increased egg mortality in oiled versus unoiled streams. Thus we know there is injury from the oil spill, but the question remains, to what extent. Natural variability in wild pink salmon in the Sound is huge. In the years immediately preceding the oil spill, the return of wild pinks to the Sound varied from a high of 23.5 million fish in 1984 to a low of 2.1 million in 1988. Since the oil spill, the return has varied from a high of 17 million in 2005 to a low of 1.3 million in 2002. In 2008 the estimated return was 11.6 million fish. While we can monitor growth and egg mortality rates to assess recovery, it is very difficult, in light of the natural variability, to determine the effect on the run attributable to the spill. **[oiled sea lions on buoy]**

In sum, while we knew there was tremendous injury to individual species, there was, and is, much uncertainty as to the exact amount of that injury.

Litigation

In the months after the spill, hundreds of lawsuits were filed by governments and private businesses and individuals.

Private plaintiffs

- **Trial in 1994**
- **Jury found**
 - **Reckless**
 - **Compensatory damages of \$287 million**
 - **Punitive damages of \$5 billion (\$5,000 against Hazelwood)**
- **Appeal to Ninth Circuit**
 - **Three times**
 - **Decision in 2007 reduced punitive award to \$2.5 billion**
- **U.S. Supreme Court**
 - **Reduced further to \$507 million**

- **Most of that amount now paid; interest still being litigated**

Governments

- **Criminal**
 - **State prosecuted Hazelwood**
 - **Convicted of B misdemeanor**
 - **1,000 hours of community service**
 - **Federal**
 - **Went after Exxon and Exxon Shipping on felonies**
 - **1991 pled to felony charges**
 - **Migratory Bird Treaty Act**
 - **Clean Water Act**
 - **Refuse Act**
 - **Fine \$150 million (\$125 remitted and \$25 million to pay)**
 - **Restitution of \$50 million each to State and U.S.**

Private Plaintiff Litigation

Trial: The trial of the Private Plaintiffs' claims took place in the summer and fall of 1994. The trial was conducted in three phases. In Phase I, the jury determined that Exxon's negligence was a legal cause of the March 1989 EVOS and further that Exxon's conduct had been reckless. In Phase II, the damage claims of the fishermen were tried. The jury returned a special verdict on August 11, 1994 totaling almost \$287.0 million. The earlier determination of recklessness necessitated Phase III – the Punitive Damages phase. On September 16, 1994, the jury determined that Exxon and Joe Hazelwood were liable for punitive damages in the amount of \$5,000,000,000 and \$5,000 respectively. Other damage claims were settled before trial.

The two verdicts were ultimately reduced to judgment, which was entered more than two years later on September 24, 1996. After offsets for Exxon's voluntary claims payments, TAPL Fund payments and other adjustments, the \$287.0 million special verdict award from Phase II was ultimately reduced to a net compensatory damages

judgment of \$19.6 million. The punitive damage awards of \$5.0 billion against Exxon and \$5,000 against Hazelwood were included without adjustment by Judge Holland. Exxon appealed a number of issues. Primary among them was the award of punitive damages at all as well as the amount of any such damages if awarded

Ninth Circuit: The appeal went to the Ninth Circuit three times between 2001 and 2007 with the award ultimately being reduced to \$2.5 billion. Exxon asked the United States Supreme Court to accept certiorari on a series of questions.

U.S. Supreme Court: The Supreme Court granted cert with respect to three of the questions: (1) whether Exxon, as the ship's owner, could be held liable for the reckless actions of the ship's master while at sea, an old doctrine dating to a case decided in 1818 regarding the actions of a privateer (*Amiable Nancy*); (2) whether the federal Clean Water Act provided the exclusive punishment for maritime spills such as this and thus punitive damages were not available; and (3) whether the Supreme Court, in its role as the highest court reviewing maritime law, should set a policy based limitation on punitive damages in maritime cases that was less than what due process would allow.

The case was extensively briefed by the parties, including 22 amicus briefs, ranging from the U.S. Chamber of Commerce on behalf of Exxon, to the State of Alaska on behalf of the private plaintiffs. Separate from Alaska, thirty-three states joined a brief submitted by Maryland on behalf of the private plaintiffs as to the first two issues I described earlier. The case was argued before eight Justices on February 27, 2008. The ninth

Justice, Samuel Alito, recused himself because he owned a substantial number of shares of Exxon stock. The practical effect of this was that the plaintiffs needed only four votes to win, as a 4 – 4 tie would result in the Ninth Circuit award being upheld.

On June 25th the Supreme Court issued its opinion rejecting the first two arguments (the former by virtue of a 4 – 4 tie), but finding merit in the third argument and reducing the award to \$507 million. Thus, 13 years after the jury first issued its verdict the plaintiffs will receive one-tenth of that award. The principal amount of the award has now been mostly paid out. However, the issue of the amount of interest that may be due, potentially doubling the award, and the effect of certain costs is still in dispute and has been briefed and argued in the Ninth Circuit.

Criminal Cases Brought by the Governments

The State of Alaska did not have sufficiently strong criminal laws available to justify bringing charges against Exxon or Exxon Shipping. Therefore, it filed charges against Joe Hazelwood, including misdemeanors and a class C felony. Hazelwood was eventually convicted of a B misdemeanor, and completed 1,000 hours of community work service.

The United States, on the other hand, filed felony charges against Exxon (Migratory Bird Treaty Act) and Exxon Shipping (Clean Water Act, Refuse Act, and Migratory Bird Treaty Act.) Shortly before trial was scheduled to begin Exxon and Exxon Shipping agreed to plead guilty to certain charges. The initial plea agreement was rejected, but a

subsequent one was later approved. The companies agreed to a \$150 million fine, with \$125 million remitted. Of the \$25 million to be paid, \$12 million went into the North American Wetlands Conservation Fund. This money is used by the United States to pay for conservation projects around the country and has resulted in some misunderstandings in the past. On several occasions money from this part of the fine was used for conservation projects far removed from Alaska, such as in New York. Nonetheless the projects were identified as having been paid by Exxon Valdez settlement money which led to considerable questioning here in Alaska as to why we were spending the money in far off places. In fact we had no control over this money.

The plea agreements also had a restitution provision. The companies agreed to pay \$50 million each to the State and U.S. to be used for restoration projects in Alaska. The restitution money is allocated by the governments individually. For the state this meant that the uses of the money were determined by legislative appropriation. All of the money has been obligated to various projects. Examples of these projects include the Alaska SeaLife Center in Seward that some of you may have seen, recreational amenities such as trails, cabins and mooring buoys in the Sound and Kodiak area, spill prevention and response programs and habitat protection. For the federal government, most of the monies were used to purchase and protect important habitat in the spill area.

Civil Litigation by the Governments

In August, 1989 the State of Alaska filed a civil action against Exxon, Exxon Shipping, Alyeska, and the various pipeline companies in state Superior Court. The state was

subsequently sued by a number of private plaintiffs over its alleged failure to adequately regulate Alyeska and the shipping companies.

Over the next two and one-half years the state engaged in litigation with Exxon and the other defendants. The United States did not file suit against Exxon immediately and participated in the formal litigation only to the extent of producing documents required by the parties. During this two and one-half year period the state expended over \$32 million in direct litigation costs and an additional \$38 million for damage assessment activities in support of the litigation. For people like me who are math challenged, that is over \$2 million per month.

In the course of the litigation the parties took hundreds of depositions, sometimes doing as many as six at one time. Ultimately we processed over 20 million pages of documents. That is a lot of paper and it created problems of space and cost at the Alaska State Archives that remain until this day. It is expensive to keep the documents in paper form and even more expensive to transfer them to electronic form. Logic dictates that they be destroyed as most serve little ongoing purpose. However, they may have significant historical value. Ultimately I expect that a balance will be struck and most destroyed with some retained permanently.

Similar issues have arisen through the years for scientific samples which are no longer necessary but are in expensive freezer or other storage devices and are subject to a court

imposed retention order. We did manage to get permission to destroy the otter carcasses that had been through a couple of freeze thaw cycles due to electrical problems at one of our storage units.

The litigation team was divided into three parts, liability, damages and documents. I have briefly described document production, and liability was essentially a large vehicular accident case, though with overtones of corporate mismanagement. What set this case apart was the damage issue. I described earlier the difficulties involved in assessing the biological injury from the oil spill. Of equal complexity was the need to place a value on that injury.

Damages

It was not as easy to value the loss as one might first imagine. It was clear that the damage would, in dollar amounts, be a large number, but what was that number and how could it be proven? For example, what is the value of an otter, a seal or a common murre? What is the financial cost of a cutthroat trout that grows slower? To answer these questions we looked, for the most part, to the value of the services that these resources provide to people, such as sport fishing and tourism.

Resource Valuation

Nevertheless, we made at least a passing attempt to value the cost of an animal. **[captured goldeneye]** One of the first studies we initiated to evaluate damages from the

spill was a replacement cost analysis, or as it was known colloquially among those involved in the litigation, the “Buck a Duck” study. This study estimates the value of injuries to natural resources based on the costs of relocation of adult animals from areas where they are abundant, the replacement of animals and the rehabilitation of injured animals. **[releasing sea otter]**

Relocation costs are the costs of capturing an animal, acclimating it to a new location and releasing it in that location. Thus, for example, with eagles the costs of capture and relocation are \$1,000 - \$1,500 per eagle. However, eagles tend to home so this cost is not truly indicative of the costs of replacing a breeding pair. Because this factor is not well understood this is not a useful number for value.

Replacement costs are essentially the cost of raising young animals to maturity. **[bald eagle in tree]** Again looking at eagles, there have been several efforts to raise young eagles and introduce them into the wild. One of these reports a cost of approximately \$22,500 to successfully produce one adult eagle living in the wild. Another had costs of \$12,500 - \$15,000 per eagle, while a third reported costs of about \$21,500 per eagle.

Rehabilitation costs for injured animals is a third way to value the animal. In 1989 Exxon spent about \$100,000 per eagle in its rehabilitation program for animals injured by the oil spill. Looking at all of these figures, we selected what we viewed as a reasonable approach and valued eagles at about \$22,000 per bird.

We did a similar analysis for other resources. Ultimately the total value came to about \$50 million.

Sportfishing

Sportfishing [**Kenai river fishing**] is an activity clearly impacted by the oil spill. It is also an activity for which there is historic data. For a number of years the Alaska Department of Fish and Game distributed questionnaires to randomly selected fishing license holders. The responses to these questionnaires indicated that from 1984 to 1988 sport fishing increased 10% per year in the oil spill area. In 1989 the number of anglers decreased by 13%, the days fished decreased by 6%, and the fish caught decreased by 10%. To place a value on this decrease, economists, through interviews with anglers, determined that the average person spent \$250 a day to fish in this area. This was assumed then to be the value to an average person of the fishing experience. By multiplying this value by the number of lost angler days (124,185), economists determined that the lost value of sportfishing in 1989 was approximately \$31 million.

Tourism

[**tour boat**] The impact of the oil spill on tourism was measured by surveys of planned and actual visitors to the state and the general population. These surveys indicated that visitor spending in 1989 decreased 8% in Southcentral Alaska and 35% in Southwest Alaska. In the spill area 59% of businesses reported cancellations. Of visitors who actually traveled to Alaska, 16% reported that the oil spill affected their travel plans and

half of these said they avoided Prince William Sound altogether. The result was an estimated loss of \$19 million in 1989.

Passive Use

Ironically, the largest damage, in monetary terms, came not from the direct use of injured resources by individuals such as sport or commercial fishermen but rather from people who have only an indirect connection to Prince William Sound. These uses are called passive uses and include the loss felt by people who have not visited the oil spill area but wish to visit some day, those who have no plans to use the area but want their children to have the opportunity and those who have no plans for direct use but simply value the fact that unspoiled wilderness exists. **[ice on beach]**

Although this may sound somewhat esoteric, it is grounded in reality. By way of example, some of you may belong to conservation groups such as the Nature Conservancy or the Conservation Fund. In that capacity you give money so that the organization can preserve specific endangered habitats. You do not plan to visit or use these habitats, but you are willing to spend money to ensure that they continue to exist in their current unspoiled state. In giving this money you have identified the value to you of their preservation. If the lands are despoiled, you have suffered a loss and that loss can be measured by the amount of money you were willing to give to see that they remained unspoiled. How then does one measure passive loss for an event such as the EXXON VALDEZ? **[PWS aerial]** Can that measurement stand up in court in an action to recover damages?

To answer this question the State of Alaska brought together a team of the most prominent economists in the country working in the area of measurement of passive loss. Peer review for the team was provided by Dr. Robert Solo, winner of the Nobel Prize for economics. Ultimately the state spent over \$3 million to complete the study measuring lost passive use.

We learned early that the most accepted measurement of passive loss was through a method called contingent valuation. In essence this calls for determining the loss suffered by individuals through a public opinion survey that could be extrapolated across the population that was injured. Although the theory of this methodology was well developed and was used on a number of occasions, it had never been tested in court. Moreover, it was controversial among economists. Thus while we believed that the measurement of damages was legitimate and should be investigated, we were mindful that it would be strongly challenged in court. For that reason whenever we were presented with a choice in how to design or administer the survey we invariably opted for the more conservative, defensible path.

First, it was necessary to determine the population that suffered the loss. In the case of a local river that may be as small as the population of a city or county; in the case of something like the Grand Canyon it may be as large as the nation. Because of the extent and depth of the public knowledge and feelings about the EXXON VALDEZ oil spill, it was clear that the appropriate population was the nation.

The key to measurement of lost passive use is to design and implement a survey through which people are asked how much they value the attribute that is lost. This can be done by measuring either: (1) the amount a person would be willing to pay to prevent the oil spill or (2) the amount they would be willing to accept to allow it to happen. Studies have shown that use of a willingness to pay concept is more conservative and more defensible and for that reason we took that approach.

Once this decision is made the team set about to design a survey that would answer the question in the most accurate manner. Using focus groups, test surveys and pilot surveys in every region of the country, the team developed a willingness to pay survey. The survey first described the EXXON VALDEZ oil spill through words and pictures. To describe the damages the survey used a very conservative variation of the estimated numbers. Thus, for example, the number of dead murre was described as between 56,000 and 112,000 rather than the 250,000 that we believe were actually killed. These conservative numbers were used because we felt that defending the methodology would be difficult enough without the additional burden of defending the description of damages at the high end of the range. We were also very careful to not include any damages, such as commercial fishing or subsistence activities that were claimed by other litigants.

The survey went on to say that danger of another equally bad spill still exists in Prince William for the next ten years while double hulled tankers are phased in. Therefore, survey respondents were told that a special safety program could be put in place to

prevent an equally bad catastrophe and that people had proposed to fund the program by a one time tax on oil companies as well as individuals. The survey then concluded by asking the respondent if they would be willing to pay a specified amount (between \$10 and \$120) for this program.

The survey was given in person to 1,200 persons. Alaskan households were not included in the survey. We found that over 90% of the respondents were aware of the oil spill, justifying our initial decision to base the damages on a national sample.

The survey results, after being run through what I can only describe as complicated formulas, found a median willingness to pay of \$31 per household. Multiplied by the number of English-speaking households in the United States (90,838,000), the total passive use damages came to \$2.8 billion.

Even though we had taken the conservative turn at every fork, problems remained in obtaining this amount through the courts. As I mentioned earlier, this methodology was never tried in court. It was controversial and just as we had a Nobel Laureate willing to give it his blessing, Exxon had one in the wings waiting to say no. Taking all of these uncertainties into account we decided on \$1 billion as an acceptable amount for purposes of settlement.

Settlement

In 1989 there was a brief attempt by the federal government to settle a good portion of the governments' legal claims against Exxon for about \$500 million. We determined, rightly, that this amount was too low, and the attempt fell by the wayside.

On August 28, 1991 a Memorandum of Agreement setting out the rules by which the governments would work together to recover and expend any settlement money received from Exxon was approved by the federal district court. In late September the governments and Exxon signed a civil settlement agreement and Exxon and the United States reached a criminal plea agreement. Those agreements were approved by the court on October 8, 1991. Under the civil settlement agreement, the governments were to receive \$900 million from Exxon over a 10 year period. There was a provision for payment of an additional \$100 million for damages not known at the time of the settlement. The money was to be used to reimburse the governments for their expenses in the oil spill, to pay for any additional cleanup and to pay for restoration. With these agreements in hand we turned our attention to restoration.

Restoration

The MOA called for the expenditure of settlement money to be overseen by six Trustees. They were the Secretaries of the United States Departments of the Interior and Agriculture, the Administrator of NOAA, the Commissioners of the Alaska Departments of Fish and Game and Environmental Conservation and the Attorney General. These trustees created a Trustee Council [**wood block EVOSTC**] in Alaska to handle the day to day decisions on expenditures. On the federal side the Council members were the head of the Alaska

National Marine Fisheries service office, the Alaska Regional Forester and the Alaskan Special Assistant to the Secretary of the Interior. For the state the Council members were the state Trustees.

During the first few years of the Council's existence, there were two very important and fundamental decisions that were made. First we needed to develop a staff to carry out the mission of the Council. Initially, somewhat by default, we relied on the Trustee agencies to provide the staff. However this method soon proved problematic. Although the agency staff were of the highest abilities and integrity, the public was concerned that agencies were using their positions to feather their own nests in a manner by supporting projects that benefited that agency before the Council. Rightly or wrongly this impression presented a substantial problem for a group like the Council that was under such intense public scrutiny and depended on public support to complete its mission. Therefore, after a period of time we decided to move to a professional staff.

The second major decision that was needed was a general outline of how we were going to spend the settlement monies. At the time there was much discussion by the public as to whether the money should be used for scientific research, direct restoration activities, habitat acquisition or oil spill prevention. Some advocated spending most of the money on injured natural resources while others felt that people who suffered from the spill should benefit directly.

To answer this question we first looked to see what was legally permissible. Through this analysis some proposals, such as prevention of future oil spills were rejected. We then took the remaining proposals and asked the public their opinion. Perhaps the most interesting effort we made at public outreach was a questionnaire we sent out to many Alaskans. In it we posed the question of what should we do with the settlement money. We received back what several agencies have told me was the largest public response to any solicitation of public input in Alaska at that time. In addition to these responses we conducted public hearings and solicited letters and other forms of comment. The Council took this public opinion very seriously, reading each public opinion letter sent by the public. In large part this concern for public opinion, was based on our understanding of the damages resulting from the oil spill. As noted earlier, by far the major damage was to the public perception of the damage [**oiled beach**] to the oil spill area and the animals that lived there, so called passive use. To remedy that harm, it was incumbent on us to listen closely to the public and to respond to their concerns where legally permissible and scientifically possible.

Listening to the public we devised what we came to describe as a balanced and comprehensive plan for restoration. It included money for habitat acquisition, scientific research, and direct restoration through physical manipulation of the environment. Through 2007 the monies were used as follows: \$216 million for cleanup and reimbursement of government costs; \$178 million for research, monitoring and general restoration; \$375 million for habitat protection and \$42 million for administration and public information.

I would like to briefly touch on some of the high points of those efforts.

Research, Monitoring and General Restoration

As noted [tagging blackoystercatcher chick] we have spent over \$175 million on research, monitoring and general restoration since the settlement. The actual number is a little higher since a good portion of the monies spent on reimbursement of government costs pre-settlement was for spill assessment and research costs and a significant portion of the administrative costs is for scientific review and evaluation of proposed projects. The types of projects have been varied. They range from direct manipulation of stream beds to open them up to salmon spawning, to tracking the population recovery of sea birds and marine mammals, to enhancing subsistence resource through the targeted release of hatchery raised fish and shell fish for subsistence users.

Some of the projects that I believe have been among the most important have been those that aid resource managers in making in-season resource allocation decisions. For example, Trustee Council funds played a large role in the development of otolith marking techniques which allow for the relatively inexpensive marking of hatchery fry. **[Picture of hatchery fry, also included salmon in stream photo]** This, in turn, allows fisheries managers to make accurate in-season decisions as to the numbers of hatchery or wild fish that are returning and whether fisheries must be curtailed to protect wild stocks.

Another example is genetic salmon stock identification, developed with the assistance of Trustee Council funding. This technique has played an important role in areas where mixed stocks are present, such as Cook Inlet. **[salmon in Kenai River]** In 1998, the return of sockeye salmon to the Kenai River was significantly lower than expected and fisheries managers faced a decision about closing the sport fishery altogether. Through genetic sampling of the sockeye entering the river managers documented that escapement goals to the Russian River would be met and they were able to make a sound decision to keep that popular fishery open. Without the genetic sampling method, developed with funds from the Trustee Council, managers say they would have been forced to close the sport fishery in order to err on the side of caution.

Another type of project we have funded is the prevention of further injury to the damaged ecosystem. One aspect of this is habitat protection, which I will address in a minute. A more direct action however relates to efforts funded by the Council to stop marine pollution at its source from entering Prince William Sound and the Gulf of Alaska. In Prince William Sound, new "environmental operating stations" are in place in Cordova, Valdez, Tatitlek, Chenega Bay, and Whittier. **[Pictures of stations – we were not able to obtain a photo]** Similar projects are being developed for Kodiak Island communities and three lower Cook Inlet communities. These waste management programs are designed to reduce chronic sources of marine pollution by providing facilities and services to properly dispose of used oil, household hazardous waste and scrap metals.

Finally, I would note projects undertaken to determine if oil remains in the environment in a toxic state, whether it is causing harm and whether anything can be done to remediate it. This is a concern that was not even on the Council's radar until around 2000 when it was noted that certain species in Prince William Sound continued to show exposure to oil. **[hole w/hand, beach survey & chart]** A study was then funded to determine the extent of oil remaining in the beaches and in 2001 this study demonstrated that oil remained in greater quantities and at greater levels of toxicity than anyone had anticipated. Further studies have been funded to flesh out the location and extent of the oil, whether it is bioavailable, and the extent to which it may be causing continuing harm. **[sea otter w/fucus]** This work is important not only to help determine whether further cleanup efforts should be made for this spill, but also to provide important information in the event of future spills.

Habitat Protection

[Seal Bay aerial] The protection of habitat has been a significant component of the *Exxon Valdez* oil spill (EVOS) restoration program. The acquisition of private lands, or conservation easements, from willing sellers is intended to promote natural recovery of spill-injured resources and associated services by removing the threat posed by additional development impacts, such as speculative real estate development and logging, on habitat used by injured resources.

For example, healthy riparian habitat **[riparian]** -- those areas along streams where salmon spawn, feed and rear their young -- is essential to the health of the fishery. If the

habitat required for these life stages is compromised, depleted salmon populations cannot rebuild. This lesson extends to other injured birds, fish, and mammals that nest, feed, molt, over-winter, and seek shelter in the spill area.

Habitat acquisition as a restoration strategy received overwhelming support by the scientific community and the public. In response to a request for comments on restoration alternatives, more than 90% of the respondents said that habitat protection and acquisition should be part of the Restoration Plan.

A systematic process was developed to help ensure that habitat protection actions would provide restoration benefits. Habitat protection proceeded in three stages; Imminent Threat, Large Parcel and Small Parcel.

The Imminent Threat program represented an effort by the Trustee Council to identify those parcels which should be addressed first in light of ongoing or imminent plans of development. **[logging]** This effort resulted in the protection of lands within Kachemak Bay State Park (which was accomplished through roughly equal contributions from the Trustee Council, State of Alaska criminal restitution funds and settlement of the oil spill case against Alyeska), and the Seal Bay and Tonki Cape parcels located on Northern Afognak Island which have since become Afognak Island State Park.

The Large Parcel program, designed to provide protection of areas of habitat larger than 1,000 acres, continues even through the present. **[habitat]** From 1994 through 2007 the Trustee Council expended \$348 million on large parcels which, together with an

additional \$56 million leveraged from other sources, served to protect over 635,000 acres of habitat in the oil spill area. **[Map of acquisitions]**

The Small Parcel program focuses on parcel of less than 1,000 acres that provide key protection of access for the public. Such parcels are often located along important and productive anadromous streams, **[stream]** at the head of bays or at key access points. Though diminished in the frequency of acquisitions in recent years, the program remains available when opportunities arise. Through 2007 the Council expended almost \$23 million to protect over 9,000 acres of critical habitat through the acquisition of small parcels.

As noted, the program continues to be implemented. In March 2008, the Trustee Council authorized the expenditure of \$10,000,000 as a contribution to the purchase of three parcels on northern Afognak Island and approved the purchase of three small parcels on the Kenai Peninsula, two parcels on Kodiak Island and one parcel in Valdez.

Restoration Reserve

We also adopted the request of the public that we not spend all of the money as it came in, but rather set some of it aside for long term restoration activities. The Council did this by setting aside \$12 million a year in a restoration reserve account. In March of 1999 the Trustee Council voted to establish a permanent marine research endowment fund with the money in the reserve account. **[an injured species]** Two other accounts were set up, one to provide long term funding for the acquisition of key small parcels and a second to pay

for the long term protection, including the eventual acquisition, of land along the Karluk River on Kodiak Island, one of the most significant salmon resources in the world and a key habitat for the famed Kodiak Brown Bear. As of January, there were \$84 million in the research investment account, \$30 million in the habitat account and \$36 million in the Karluk River account.

Status of Injury

The Trustee Council periodically releases a summary of the status of the injured resources. As of 2006 that status was viewed as follows:

Recovered: archeological resources; bald eagles; common loons; common murre; cormorants; dolly varden trout; harbor seals; pink salmon; river otters; and sockeye salmon.

Recovering: black oystercatchers; clams; designated wilderness; harlequin ducks; intertidal communities; killer whales; mussels; sea otters; and sediments.

Not recovering: pacific herring; and pigeon guillemots.

This is a fluid document; just in the last few months Barrow's Goldeneye, a sea duck, was added to the list as recovering.

Herring

I would like to speak briefly about one species in particular, herring.

[herring school w/puffin] Clearly the most important species that is still experiencing significant problems is Pacific herring. Herring are an ecologically and commercially important species in the Prince William Sound ecosystem. They are central to the marine

food web; providing food to marine mammals, birds, invertebrates and other fish. Herring are also commercially fished for food, bait, sac-roe and spawn on kelp. **[hearing roe on rocks]** Pacific herring spawned in intertidal and subtidal habitats in Prince William Sound shortly after the oil spill. All age classes and a significant portion of spawning habitats and staging areas in the Sound were contaminated by oil. Juvenile and adult herring typically come to surface at night to feed and would have had increased exposure probability at this time. Lesions and elevated hydrocarbon levels were documented in some adult Pacific herring from the oiled areas.

[herring aerial] The herring fishery in the Sound has been closed for 13 of the 19 years since the spill. The population began increasing again in 1997 and the fishery was opened briefly in 1997 and 1998. However, the population increase stalled in 1999, and recent research suggests that the opening of the fishery in 1997 and 1998 stressed an already weakened population and contributed to the 1999 decline. **[herring on boat]** The fishery has been closed since then. No trend suggesting healthy recovery has occurred over the last eight years.

Reopener

The Exxon Valdez oil spill Reopener is an issue that you may have seen mentioned lately. Essentially the Reopener is an express exception to the broad release that the governments otherwise provided Exxon as part of the settlement. The provision establishes a procedure for “reopening” the Exxon Consent Decree to obtain additional natural resource damage recoveries in certain circumstances:

- a population, habitat or species must have suffered a substantial loss or decline
- the injury could not have been known nor reasonably anticipated by a Trustee from any information reasonably available to any Trustee on the date of the settlement

If these circumstances are present, then at any time between September 1, 2002 and September 1, 2006 the State and the United States could present a claim to Exxon for up to \$100 million to pay for specifically identified restoration projects that restore unanticipated injury from the oil spill. The cost of the project could not be grossly disproportionate to the benefits.

On August 31, 2006, the U.S. Department of Justice and the State of Alaska Department of Law submitted a demand letter to ExxonMobil to fund a restoration project at a cost of up to approximately \$92 million under the Reopener provision.

The Proposed Plan:

The proposed project has two major objectives: (1) to determine the locations, approximate amounts, and chemical states of all significant residual deposits of oil [oil on beach, 2008] from the spill in the spill area; (2) to accelerate the natural processes of degradation and dispersal of the lingering oil, or otherwise restore the oiled sites, to the greatest extent scientifically appropriate taking into

account such factors as the size and distribution of lingering oil patches, conditions at the oiled sites, affected natural resources or human uses, and the relative benefits and costs (including potential adverse effects) of active remediation. The plan expressly calls for public participation and outreach at key stages of the process.

The ultimate cost of the project depends upon such factors as how many oiled sites require remediation and the remediation approach selected.

Discussions with Exxon continue regarding the plan. In the meantime studies were conducted this past summer to more clearly delineate the beaches where lingering oil likely occurs and to determine under what set of circumstances further cleanup would make sense. The results should become available soon.

Conclusion

In sum, **[bald eagle, head bowed]** the Exxon Valdez oil spill is an event that we all wish had never happened. Twenty years working on its aftermath has truly been an interesting, tedious, inspiring, and depressing experience for me and many others.

I would like to thank you for your time and patience today. I hope that what you have heard and seen has been of interest and I would be pleased to answer any questions anyone may have if you just grab me after we leave.