Fred Devine Diving & Salvage Co.
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Portland, Oregon 97217

Marine Salvors, Divers & Constructors

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Fred Devine Diving & Salvage Co. has been a leader in diving, and construction since 1913. Our specialties include heavy and light marine salvage, wreck removal high capacity and heavy oil pumping, underwater inspections of vessels and structures, underwater repair, environmental dredging and sampling, receiving and delivery of ship stores.

We offer a full array of underwater marine services, including video documentation, welding, cutting, hull cleaning, propeller polishing, environmental surveys and general ship husbandry.

Through constant upgrades in our technology, innovative application of our equipment and especially our experienced personnel we have earned a reputation for superior workmanship that is timely and cost effective. FDD&S owns and operates the United States only dedicated salvage ship the M/V Salvage Chief based in Astoria, OR.

CCB 107253

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Visit our website: www.freddevinedivingandsalvage.com
Fred Devine Diving & Salvage Co. has gained international recognition for their rapid response to any marine casualty, construction project or major salvage operation and provides a wide range of services.

Since 1913 Fred Devine Diving & Salvage Co., has become a leader in marine diving, construction and salvage.

Through constant upgrades in our technology, experienced employees and innovative application of our equipment we have earned a reputation for cost effective, on-time projects, done right.
**RECENT PROJECTS**

Raising the “St. Nicholas”

Rescuing “Miss Berdie”

**LA DEEPENING PROJECT** - Ocean disposal by scuttling 3 Caissons
LA DEEPENING PROJECT
Removal & Disposal of Two Drydocks
FLOATING EQUIPMENT

We have an extensive inventory of trailer able floating equipment, salvage rigging and other marine related equipment for use on our projects or for rent on yours. Visit our web site for a complete listing of available equipment at www.freddevinedivingandsalvage.com.
DIVING SERVICES

Underwater Inspections
Underwater Surveys
Underwater Welding
Propeller Polishing
Hull Cleaning
High Capacity Pumping
Video Documentation
Environmental Sampling
Fiber Optic Cable Installation
Underwater Construction
Ship Husbandry
Object Recovery
Pipeline Inspection
Environmental Dredging

SPECIALIZED ENVIRONMENTAL DREDGING

Fifteen Mile Creek
A truck carrying 4,100 gallons of oxyflourfen herbicide hit the I-84 bridge over Fifteen Mile Creek killing all aquatic life. Fred Devine Diving & Salvage Co. worked in conjunction with Foss Environmental Co. using sandbag dams below the spill to pool the stream and isolate the contaminated area; herbicides were removed using three high volume pumps. The contaminants were placed into tanks; the tanks lifted by crane and removed from the accident scene. This procedure was repeated until ODFW and DEQ testing samples assured public safety.

**HIGH CAPACITY PUMPING**

**MILOS REEFER**

The “MILOS REEFER”- The M/V SALVAGE CHIEF was hired by P & I underwriters to
proceed to St. Mathews Island, Alaska (a national wildlife refuge) to remove all the bunkers and other hazardous materials remaining on board the stranded vessel. Portable boilers and special pumps were required to remove the heavy bunkers as the sea water temperature was 35 degree F. The engine room was flooded and frozen into a solid block. A total of 130,000 gallons of petroleum products were successfully pumped out and all other hazardous material was removed.

OCEAN OUTFALLS
Installed ocean outfall for Crown Simpson Paper Co. at Samona, CA. This outfall was a 44” O.D. line 3000 feet long. After outfall was in position divers opened the diffusers and installed two anchors.

Installed ocean outfall for Crown Simpson Paper Co. at Samona, CA. This line was a 44” O.D. pipe 3000 feet long. Using the “SALVAGE CHIEF” the line was pulled from shore seaward and then anchored.

Installed ocean outfall at Coos Bay, OR. The outfall was 38” O.D. and extended 4640’ out into the Pacific. The “SALVAGE CHIEF” dredged a trench into the beach using a slip stream diverter which directed the vessels prop wash prior to pulling pipe.

The EXXON VALDEZ
The V.L.C.C. EXXON VALDEZ ran aground on Bligh Reef in Prince William Sound, Alaska, causing one of the nation’s largest oil spills. J. H. “Mick” Leitz, the salvage Master hired by EXXON, requested Fred Devine Diving & Salvage Co. divers and portable salvage equipment air transported to the scene immediately. The salvage equipment included high volume low pressure blowers with hoses and fittings that were connected to the vessel’s inert gas system and used to pressurize all damaged cargo tanks. The SALVAGE CHIEF was dispatched from Astoria and used as the primary salvage support vessel.

The Salvage team performed the work necessary to refloat and prepare the vessel for the 2,500 mile voyage to a drydock in San Diego, California. The underwater work included drilling more than four hundred crack arrestor holes and cutting off the steel plates torn loose hanging below the bottom. A R.O.V. was used to survey and video record the condition of the entire bottom. During the transit to San Diego, the SALVAGE CHIEF served as a rescue escort vessel with a helicopter aboard to transport personnel and equipment. Fred Devine Diving & Salvage Co. divers were part of the riding crew monitoring and maintaining the proper gas pressures that kept the vessel afloat. Upon arrival off of San Diego the bottom was again surveyed by R.O.V. operated from the SALVAGE CHIEF. The survey revealed a large amount of bottom plating hanging down. The Plate had to be removed by divers before the ship could enter San Diego Harbor. After arrival the salvage crew assisted in bringing the vessel up to the draft to enter the graving dock.

HEAVY & LIGHT MARINE SALVAGE
The Barge “Ignacio” - The flat deck barge Ignacio carrying 700 gallons bunker oil ruptured down the amidships beam and partially sank near Mare Island, Navy Pier No. 35, San Pablo, CA. At the direction of salvage master Mick Leitz our crew patched, removed all pollutants, dewatered, removed sand in compartments No. 4 and starboard, bottom side shell between bulkhead 18 and frame 19 for inspection. Compartments No. 4 and starboard were ballasted to maintain deflection and reduce stress in the length of the vessel. Three heavy duty softened compression or push beams were installed on deck straddling the failed areas. Two beams were welded to the deck in way of both the port and starboard.

The F/V Golden Fleece
This large Alaskan fishing vessel became stranded on top of the wreckage of a marine railway when the ways collapsed under the weight of the vessel, approximately 450 tons. The accident occurred at near high tide and the vessel came to rest with a 28 degree starboard list. The vessel was righted using two derricks which lacked the capacity to lift the vessel. The SALVAGE CHIEF was used to winch the vessel off of the wreckage while the derricks held it upright. The operation was successfully accomplished without causing additional damage to the vessel.

*The F/V “Pamela Rose”*
The 70 foot seiner “Pamela Rose” went aground on the rocks a mile south of Newport, CA harbor. Salvage Master, Mick Leitz was called to the scene to orchestrate the successful removal of the bait boat.

The Barge “Mr. Chips”
This fully loaded barge was lost by its towing vessel during a severe storm which blew it ashore on the open ocean beach at Ocean Shores, Washington. The barge including cargo were successfully refloated by the SALVAGE CHIEF. The SALVAGE CHIEF was anchored offshore using 3 six ton Eells anchors and 3 tow lines were connected to the barge. In this configuration the SALVAGE CHIEF is able to exert more than 300 tons of force on a stranded vessel. The SALVAGE CHIEF can be configured to pull 500 tons if necessary, the equivalent of 50,000 horse power using standard tugs.
The M/V PROTECTOR ALPHA’s Engine Room and Superstructure caught fire while loading at a grain elevator at the Port of Kalama, Washington in the Columbia River. The ship was removed from the grain dock to prevent the fire from spreading to the elevator and grounded. The SALVAGE CHIEF was called to extinguish the fire and keep it from spreading to the forward portion of the vessel. The fire was successfully contained and extinguished in the engine room and superstructure using 2000 gallons of high expansion foam and water.
The Cargo Barge ZB 304 grounded during heavy weather near Alsek River in the Gulf of Alaska 38 miles east of Yakutat, the result of a parted towline. A salvage crew was dispatched by air to the casualty to evaluate the situation and prepare the barge for refloating.

The SALVAGE CHIEF responded from Astoria, Oregon. Specialized salvage equipment was transferred by helicopter from the SALVAGE CHIEF and connected to fittings previously installed in the barge. Three six ton salvage anchors were deployed and three tow lines connected to the stranded barge.

The heavily damaged barge was refloated and towed to Yakutat, Alaska. The cargo was transferred to a replacement barge and delivered to its destination by Dunlap Towing Co. The barge was declared a total loss but in excess of three million dollars worth of cargo and equipment was saved from certain destruction. An environmental disaster on a pristine Alaskan beach was avoided.
The Tanker SANSINENA exploded, burned and sank at berth No. 46, Los Angeles, California. The SALVAGE CHIEF was dispatched to undertake this major harbor clearance task. The principal dimensions of the wreck were 810 feet overall length 104 ft breadth and 60 feet deep. A total of 16,414 long tons of steel was removed. Approximately 30,000 bbls. of bunker oil was recovered from the wreckage and from the bottom of the harbor. The entire task was completed in 104 working days. The salvage crew consisted of 16 divers and 50 support personnel.
The F/V ANN KATHLEEN ran aground at Klipsan Beach, Washington while harvesting crab pots. The SALVAGE CHIEF used two salvage winches leading to two six ton Ells anchors. The casualty was connected to the SALVAGE CHIEF by 3000’ of polyolefin tow line to remove the crabber from the open ocean beach. The vessel was towed to Aberdeen, Washington for repairs.
The Sand Dredge Bell 157

The Sand Dredge Bell 157 loaded with sand sank in San Pablo Bay, California. Two crewmen working below decks perished during the sinking. With the aid of two heavy lift crane barges and 38 ea. nine ton lift bags the SALVAGE CHIEF winched the 200’ dredge approximately 2000 yards across the bay into 17 feet of water at mean low tide. During low water the deck of the dredge was above water and the salvage crew could commence pumping and refloated the dredge. Due to the age of Bell 157 hull, it was declared a total loss and scraped.
The F/V NITA H

The 97’ F/V NITA H ran aground on an open ocean beach near Monterrey Bay, California. After several failed attempts by a large ocean tug to refloat the fishing vessel the owners hired the SALVAGE CHIEF. The SALVAGE CHIEF quickly responded and promptly refloated the vessel using its unique winching system. The SALVAGE CHIEF towed it to San Francisco, California for repairs.

This is an example of one of many fishing vessels refloated by the SALVAGE CHIEF usually with minimal damage and lost time.
Oil Barge Millicoma

Fred Devine Diving & Salvage Co. was contracted by Sause Bros. Ocean Towing to salvage the oil barge “Millicoma” from the rocky cove below North Head Lighthouse north of the mouth of the Columbia River. The 350 foot barge broke loose from a tugboat towline in bad weather on the Columbia River bar. When weather permitted Fred Devine Diving & Salvage Co. & Sause Bros. Ocean Towing personnel were put aboard to prepare the vessel for refloating. Eleven of the fifteen fuel tanks were extensively damaged. Four of the six rake tanks were also damaged. President and Salvage Master of Fred Devine Diving & Salvage Co. called in the Company’s 202 foot salvage vessel the “M/V Salvage Chief” to winch the “Millicoma” from the rocky cove. To stabilize the barge 10” tow lines were flown by Columbia Helicopters Boeing Vertol between the “M/V Salvage Chief” and the barge “Millicoma”. Buoyancy was restored to the barge by using large air blowers to pump air into the damaged cargo tanks. The “M/V Salvage Chief” successfully winched the barge “Millicoma” from the rocky cove.
The Rail Car Barge CORDOVA was driven ashore during an extremely severe storm at nearly high tide. The ocean can be seen at the lower right hand corner of this photograph.

The tractor is digging a trench parallel to the side of the barge which facilitated swinging the bow of the barge seaward approximately 15 to 20 feet on each following high tide. After the barge was swung approximately 45 degrees to the coast line the seas assisted in washing sand from around the barge.

The CORDOVA is being winched steadily through the breakers by the SALVAGE CHIEF. Two members of the riding crew can be seen standing on one of the box cars.

The condition of the vessel was monitored throughout the refloating process and during the voyage to Whitter, Alaska where the rail cars were discharged.
The SALVAGE CHIEF was called to the rescue of the 398 foot barge SEA SPAN RIGGER which had gone hard aground on rock on the West Coast of Vancouver Island when her tow line parted during a storm. The barge, buckled in the center, had to be cut in half to facilitate salvage. Each half was patched, pressurized with low pressure high volume air, pulled off the rocks and towed to a shipyard in Victoria, British Columbia for repair.