MAKING A DIFFERENCE...

IN WATER RESOURCES

The original civil mission of the Corps of Engineers was to provide support to navigation. Where it exists, water transportation is the cheapest mode of shipment for commodities such as coal, petroleum, farm products, and chemicals. Today the Corps maintains 12,000 miles of commercial waterways, serving 41 states and 131 of the nation's largest cities and carrying one sixth of America's inter-

PUTTING THE COLUMBIA TO WORK

Since the Columbia River in the Pacific Northwest was discovered nearly 200 years ago, more than 250 ships have met disaster at its mouth, which is nicknamed, "Graveyard of the Pacific." Today, the mouth of the Columbia is one of the busiest entrances on the West coast. More than 2,000 ships cross the bar each year, and navigation is possible as far inland as Lewiston, Idaho, 485 river miles away — due, in large part, to water resource projects developed and maintained by the U.S. Army Corps of Engineers.

Corps navigation locks in this area have allowed waterborne commerce to grow from 73 thousand metric tons in 1930 to more than 10 million shipped today. Other area navigation projects include building and maintaining coastal jetties and harbors in Oregon, Washington, and Alaska.

Flood control is particularly important in this region. Floods like the historic 1948 Columbia River flood are today nearly impossible because of a system of 30 flood control dams that the Corps operates on the river and its tributaries. Regional flood damages prevented by Corps projects now total more than $9.4 million — four times the projects' original cost.

Not only do Corps dams provide flood control, but in a drought year, the dams work in reverse, providing water storage and releases to ensure continued stream flow for power generation and fish migration.

city cargo. Corps personnel operate 235 locks along these waterways.

The Corps also builds and maintains harbor channels at 114 major seaports, each handling more than two million tons of cargo a year. This a critical task as one job in five in the U.S. is dependent on import and export trade.

Another major part of the Corps' water resources mission is dredging both at ports and on inland waterways. Each year the Corps, and private dredges under contract, move 300 million cubic yards of sand and soil — enough to bury the entire city of Washington, D.C. to a depth of five feet. The Corps then actively puts this material to productive use such as beach nourishment — the replenishment of sand washed away by ocean currents.

Corps flood control involves not only dams and reservoirs (the Corps has built more than 400 of them), but also urban projects such as the deepening and straightening of channels to pass floodwaters faster. Through 1986, the $20 billion spent on flood control have prevented an estimated $180 billion in flood damage, not to mention, the saving of thousands of lives.

Although navigation and flood control are key to water resources, many Corps projects serve additional purposes, such as generation of hydroelectric power. The Corps generates about 30 percent of the nation's hydropower, or 3 1/2 percent of its total electric energy.

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