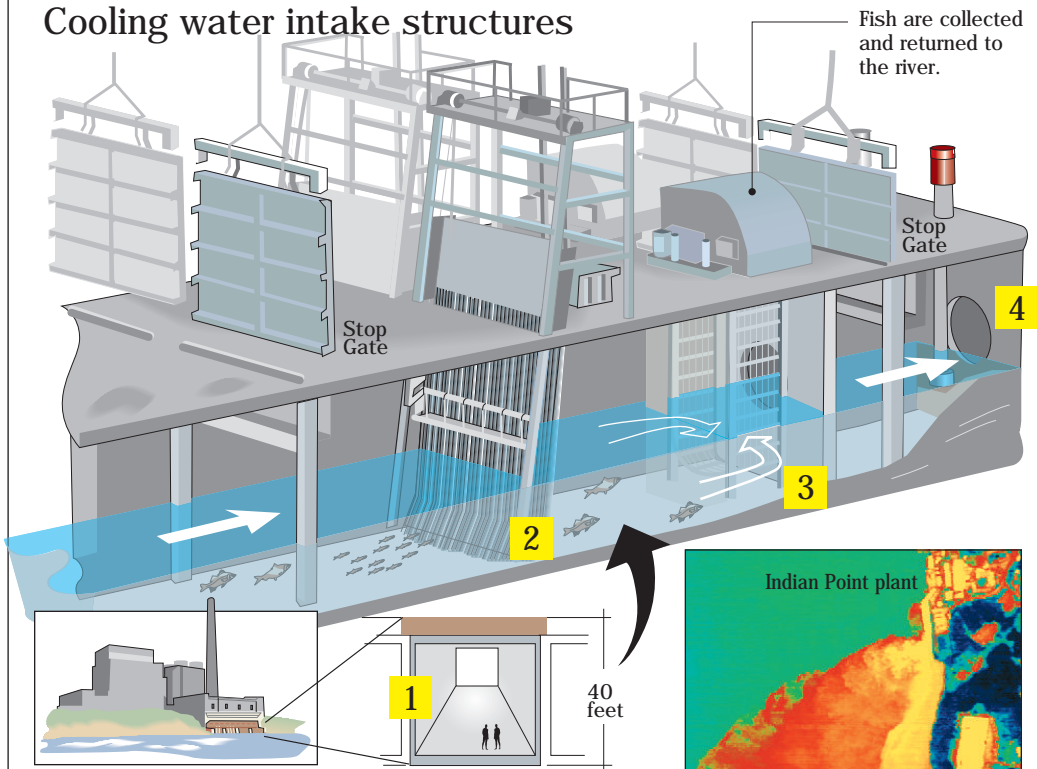


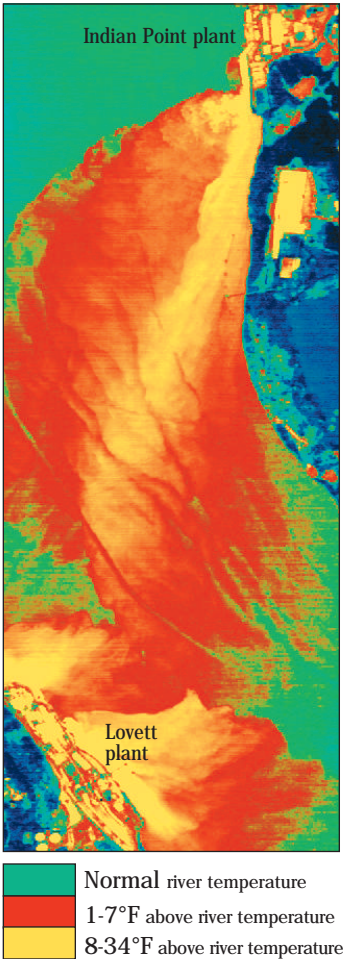
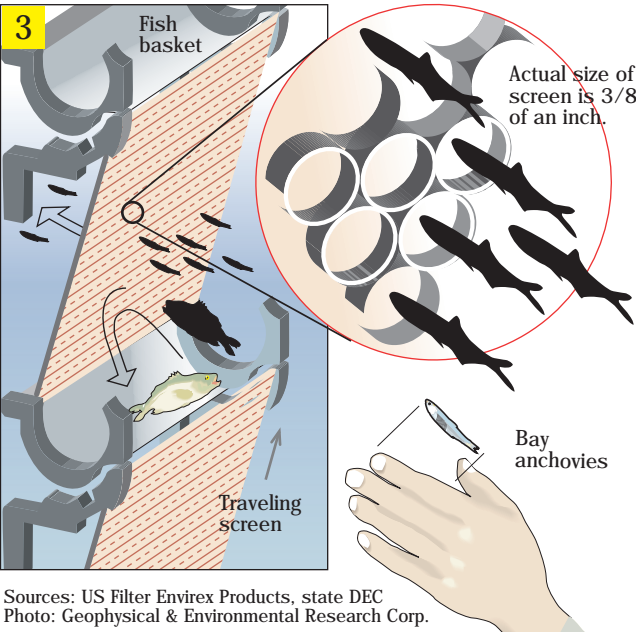
Power plant screening

Power plants such as Indian Point use billions of gallons of Hudson River water daily for their cooling process. Screens below water that are attached to machines are supposed to keep fish and other debris from entering the cooling system, though they do not remove the smallest fish and plants.

Cooling water intake structures



- 1. A series of pumps sucks water through 40-foot troughs into a building where an array of screens removes most debris.
- 2. Trash rake: A row of 3/8-inch steel bars, 4 inches apart, blocks large debris, and a trash rake removes the items from the water.
- 3. Fish travel screen: A revolving series of 3/8-inch mesh screens with attached baskets catches small fish and dumps them into a trough, which takes them back to the river.
- 4. Cooling water: Billions of baby fish, eggs, larvae and plants flow with the water into the plant's heat exchanger and are killed as the temperature rises.



Thermal shock

The river water is drawn into heat exchangers, where it cools steam used to generate electricity and picks up the extra heat. This heated water is pumped back into the river through a 4-foot-wide pipe and forms a thermal barrier that kills many of the fish swimming through it.

Sources: US Filter Envirex Products, state DEC
Photo: Geophysical & Environmental Research Corp.