

**Subject:** New Device to Help Restore Water Quality

**Story Summary:** Polluted, oxygen-starved waters may get help from a new low-energy aeration system being tested in Wilson Bay, North Carolina by the city of Jacksonville. The inventor believes it has widespread application.

**TRT:** 1:52

**Suggested Lead:** Polluted waters often have poor circulation that robs them of oxygen. In North Carolina, researchers are studying a new way to keep the water flowing. Stewart Truelsen reports.

**Suggested Supers:** Wilson Bay, North Carolina  
@ :04

Henry O. Pate  
Battelle Labs  
@ :15

Stewart Truelsen Reporting  
@ 1:07

Pat Donovan-Potts  
North Carolina State University  
@ 1:17

**New Device Helps Restore Water Quality**  
**Reporter Stewart Truelsen**  
**April 19, 2001**

<p>Zoom out from In Stream unit to shoreline/</p>	<p>VO/          THIS TRIANGULAR DEVICE IN A BAY OFF JACKSONVILLE, NORTH CAROLINA COULD BE A BIG STEP-FORWARD IN RESTORING THE HEALTH OF POLLUTED WATERS.</p>
<p>Shot from boat circling Pate on In Stream unit/</p>	<p>PROJECT MANAGER FOR BATTELLE LABS IS RESEARCH SCIENTIST HENRY PATE.</p>
<p>Soundbite</p> <p><b>Henry O. Pate</b>  <b>Battelle Labs</b></p> <p>Pan of water plume from unit/</p>	<p>SOT/          WHAT WE ARE TRYING TO DO IS PROVIDE CIRCULATION WHERE THERE WASN'T ANY BEFORE. THAT'S A PROBLEM WITH WATERWAYS TODAY IN THAT THEY HAVE SO MUCH ORGANIC SEDIMENTS IN THE BOTTOMS, SUCH A HIGH DEGREE OF OXYGEN DEMAND, AND CIRCULATION IS ESSENTIALLY RESTRICTED.</p>
<p>Bayfront/          Motor boat crossing bay/</p>	<p>VO/          SILT AND ORGANIC MATERIAL, FROM THE DISCHARGE OF THIS OLD WASTEWATER PLANT AND STORM RUNOFF, MADE THE BAY UNFIT FOR RECREATION.</p>
<p>Soundbite</p>	<p>SOT/          WHEN YOU HAVE A CONDITION LIKE THAT YOU BEGIN TO GET LOWER OXYGEN IN YOUR WATER WHICH IN TURN AFFECTS THE FISH, SHELLFISH AND THIS IS A WAY TO PROVIDE THAT CIRCULATION IN A MANNER THAT WE THINK CAN BE WIDELY APPLIED.</p>
<p>Pond aerator/          Outflow side of In Stream unit, shot from boat/          Putting grapefruit in water to demonstrate flow/</p>	<p>VO/          PADDLE WHEEL AERATORS LIKE THIS ONE IN A CATFISH POND AREN'T NEW, BUT BATTELLE'S IN-STREAM UNIT HAS 10 VERTICAL DISCS THAT MOVE MILLIONS OF GALLONS OF WATER PER DAY.</p>

<p>Researcher drives boat up to deck/ Shellfish bed/ Wetlands workers/</p>	<p>A MARINE SCIENTIST AND HER COLLEAGUES ALSO ARE PLANTING MILLIONS OF SHELLFISH IN BEDS AND CONSTRUCTING WETLANDS. BOTH ACT AS FILTERS.</p>
<p>Soundbite/ Bird at water's edge  <b>Pat Donovan-Potts</b> <b>North Carolina State University</b>  Zoom out from In Stream seen through reeds/</p>	<p>SOT/ IF WE CAN CLEAN UP ANY NATURAL WATERWAY--LAKE OR POND OF STREAM OR CREEK OR RIVER UTILIZING THE RIGHT NUMBER OF SHELLFISH AND OR THESE AERATION DEVICES--WE'RE NOT SURE WHICH IF ONE OR BOTH OR THE COMBINATION IS EXACTLY WHAT'S IMPORTANT BECAUSE WE ARE STILL IN THE RESEARCH PHASE OF THIS, BUT IF, WHEN, THIS WORKS WE CAN ATTACK ANY POLLUTION AREA OF WATER THAT MAY EXIST AND CLEAN IT UP.</p>
<p>Henry on bow of boat/ Pat driving boat/  Sea gull landing/</p>	<p>VO/ THREE INSTREEM UNITS HAVE BEEN OPERATING IN THE BAY SINCE SEPTEMBER. THE REAL TEST WILL COME THIS SUMMER WHEN WATER TEMPERATURES RISE. IN JACKSONVILLE, NORTH CAROLINA, I'M STEWART TRUELSEN.</p>