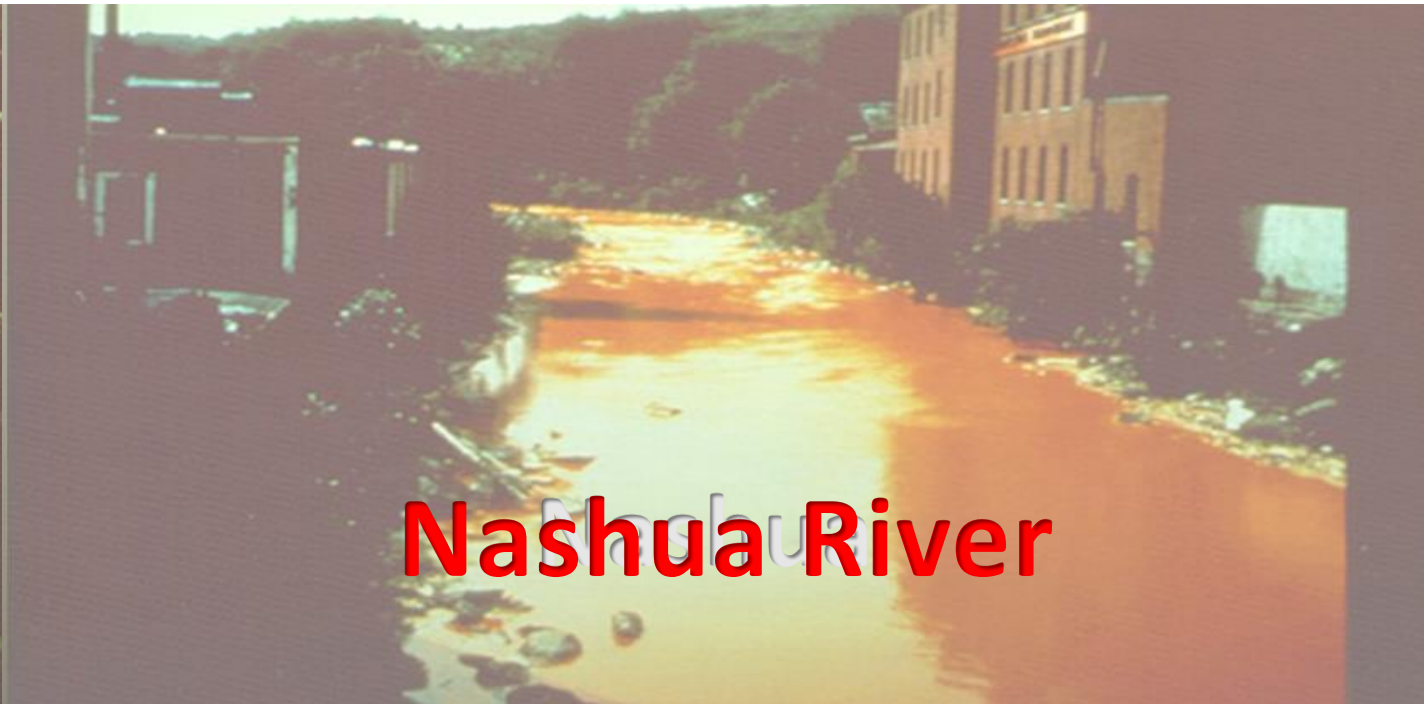


# Things I Remember





**Pimigewasset River**



**Nashua River**



**Textile Mill  
Lowell, Ma.**

# Fifty Year Odyssey

## What is the Environmental Protection Agency (EPA)?

- Established December 2, 1970
- Consolidated federal environmental research, monitoring, standard-setting and enforcement activities into one agency.
- Decades of environmental atrocities, Rachel Carson's *Silent Spring*, the Cuyahoga River fire, and the first Earth Day all contributed to its creation.



## Clean Water Act

- Objective:
  - To restore and maintain the chemical, physical and biological integrity of the Nation's waters
- National goals:
  - Eliminate discharge of pollutants to surface water
  - All waters will be "fishable and swimmable" wherever attainable

# Fifty Year Odyssey

## People and the Sound

### Water Quality Report

A planning report prepared for the  
New England River Basin

Commission

By the U.S. Environment Protection  
Agency

**Recommendation**  
EPA should initiate a special study to evaluate nutrient enrichment in western Long Island Sound and determine how much nitrogen removal WWTPs should achieve to reach water quality goals

# Fifty Year Odyssey

United States  
Environmental Protection  
Agency

Office of Water  
Program Operations (WH-547)  
Washington DC 20460

1980

Water

## Handbook of Procedures

Second  
Edition

Construction **Grants**  
Program for  
Municipal Wastewater  
Treatment Works

## Over 60 Billion Dollars during 1970-1980

- **CONDITIONS TO GET GRANTS**
  - I competent operators
  - II adequate operation & maintenance procedures to ensure NPDES compliance

# Fifty Year Odyssey



United States  
Environmental Protection  
Agency

Office of Water  
Program Operations (WH-547)  
Washington DC 20460

Office of  
Research and Development (MERL)  
Cincinnati, OH 45268

Water

430/9-79-009

February 1980

## Innovative and Alternative **Technology** Assessment Manual



Agency

## Wastewater Technology Fact Sheet Fine Bubble Aeration

### DESCRIPTION

In wastewater treatment processes, aeration introduces air into a liquid, providing an aerobic environment for microbial degradation of organic matter. The purpose of aeration is two-fold: 1) to supply the required oxygen to the metabolizing microorganisms and 2) to provide mixing so that the

blowers. Although these diffusers required little maintenance, oxygen transfer was inadequate to meet process needs, and power requirements were excessive.

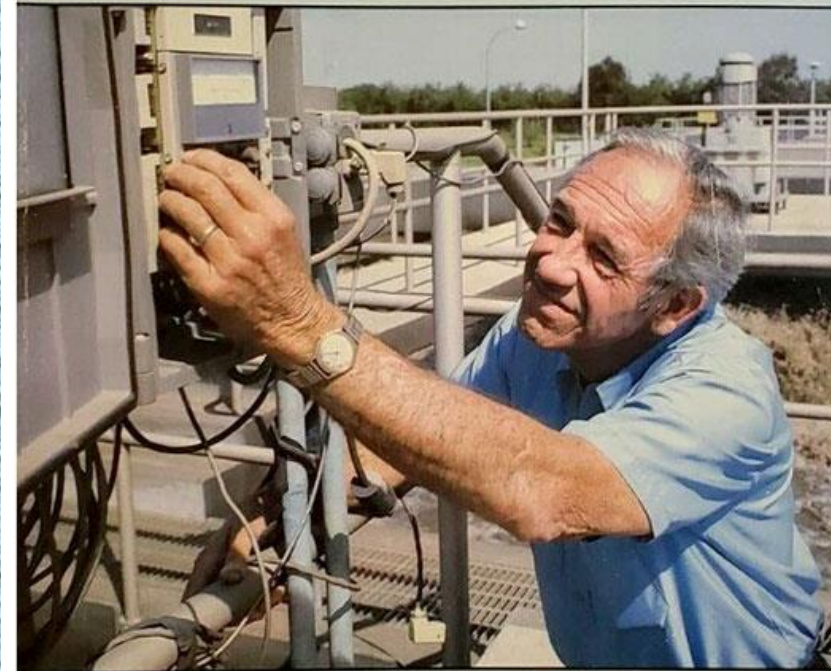
In an attempt to reduce power costs and increase treatment plant efficiency, the plant was retrofitted with a combination of coarse bubble and fine bubble

## OPERATION OF WASTEWATER TREATMENT PLANTS

A FIELD STUDY TRAINING PROGRAM

Fourth Edition

VOLUME 1



- U.S. Environmental Protection Agency
- Office of Water Programs

# Fifty Year Odyssey

## Lowell WWTP



United States  
Environmental Protection  
Agency

Office of Water  
Program Operations (WH-547)  
Washington DC 20460

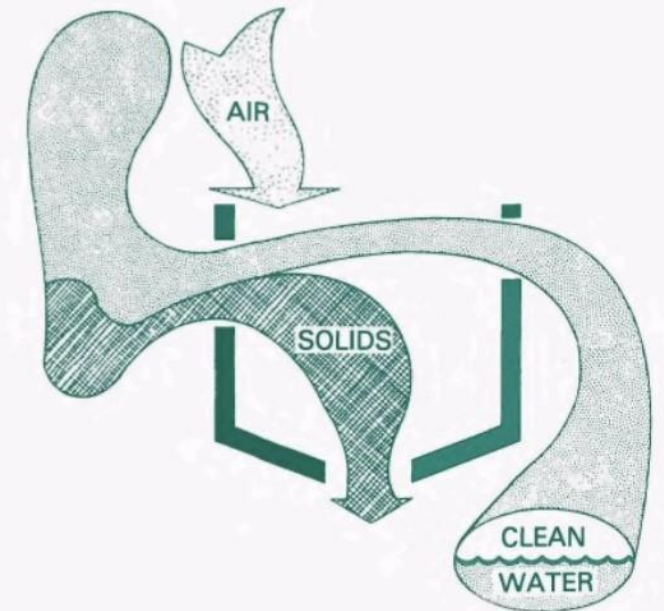
EPA 33-A 524-77  
March 1977



Water

### Aerobic Biological Wastewater Treatment Facilities

Process  
Control  
Manual



# Fifty Year Odyssey

## Deer Island WWTP

Serves 43  
Communities  
2 million people  
On-line 2000





# Fifty Year Odyssey

Members of our operator training & tech assistance team



# Fifty Year Odyssey



**EPA O&M Awards**

# Fifty Year Odyssey

## EPA Recognizes New Hampshire Wastewater Treatment Entities for Excellence

February 22, 2022

### Contact Information

Mikayla Rumph ([rumph.mikayla@epa.gov](mailto:rumph.mikayla@epa.gov))  
(617) 918-1016

**BOSTON** – The U.S. Environmental Protection Agency's (EPA) New England Office recently awarded four 2021 Regional Wastewater Treatment Awards to New Hampshire wastewater facilities and individuals to recognize them for their commitment to improving water quality.



## News Releases from Region 01

# South Kingstown, R.I. Wastewater Treatment Plant Recognized for Excellence

United States  
Environmental Protection  
Agency

EPA 832-K-98-001  
October 1998

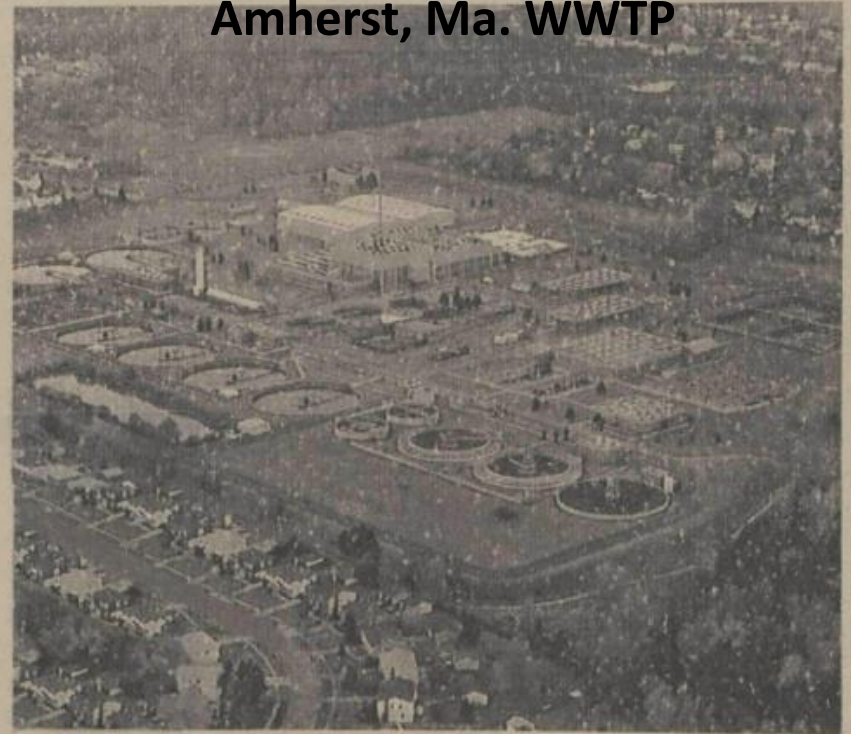
Office of Water

(4204)



## 1998 National Wastewater Management Excellence Awards Ceremony

Amherst, Ma. WWTP



# Fifty Year Odyssey

United States  
Environmental Protection  
Agency

EPA 832-F-93-001  
April 1993

Office Of Water (WH-547)

## Youth And The Environment Training And Employment Program



*The environment is a growth industry —  
providing widespread career opportunities  
for a trained workforce.*

*youth*  
and the Environment

EPA



Printed on Recycled Paper



# Fifty Year Odyssey

## NEIWPCC



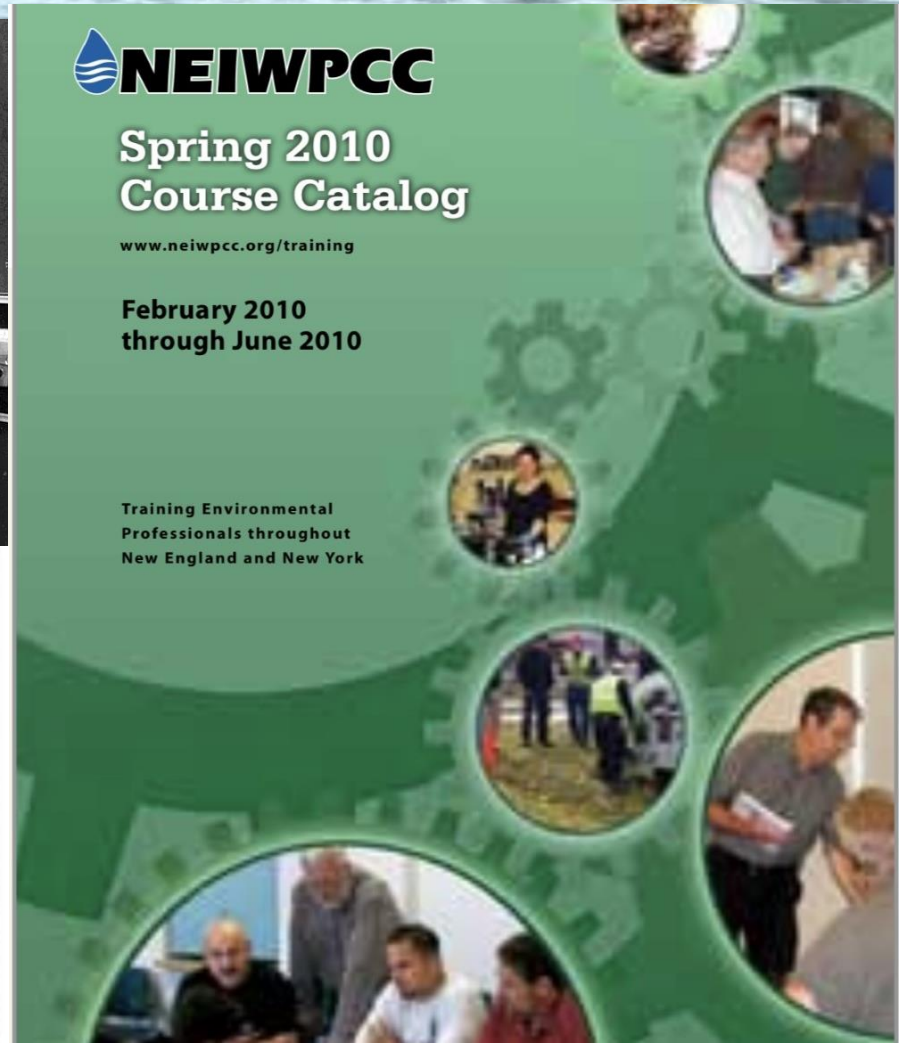
### Spring 2010 Course Catalog

[www.neiwpcc.org/training](http://www.neiwpcc.org/training)

February 2010  
through June 2010

Training Environmental  
Professionals throughout  
New England and New York

Started - 1968



# Fifty Year Odyssey

## Upper Blackstone WPAD

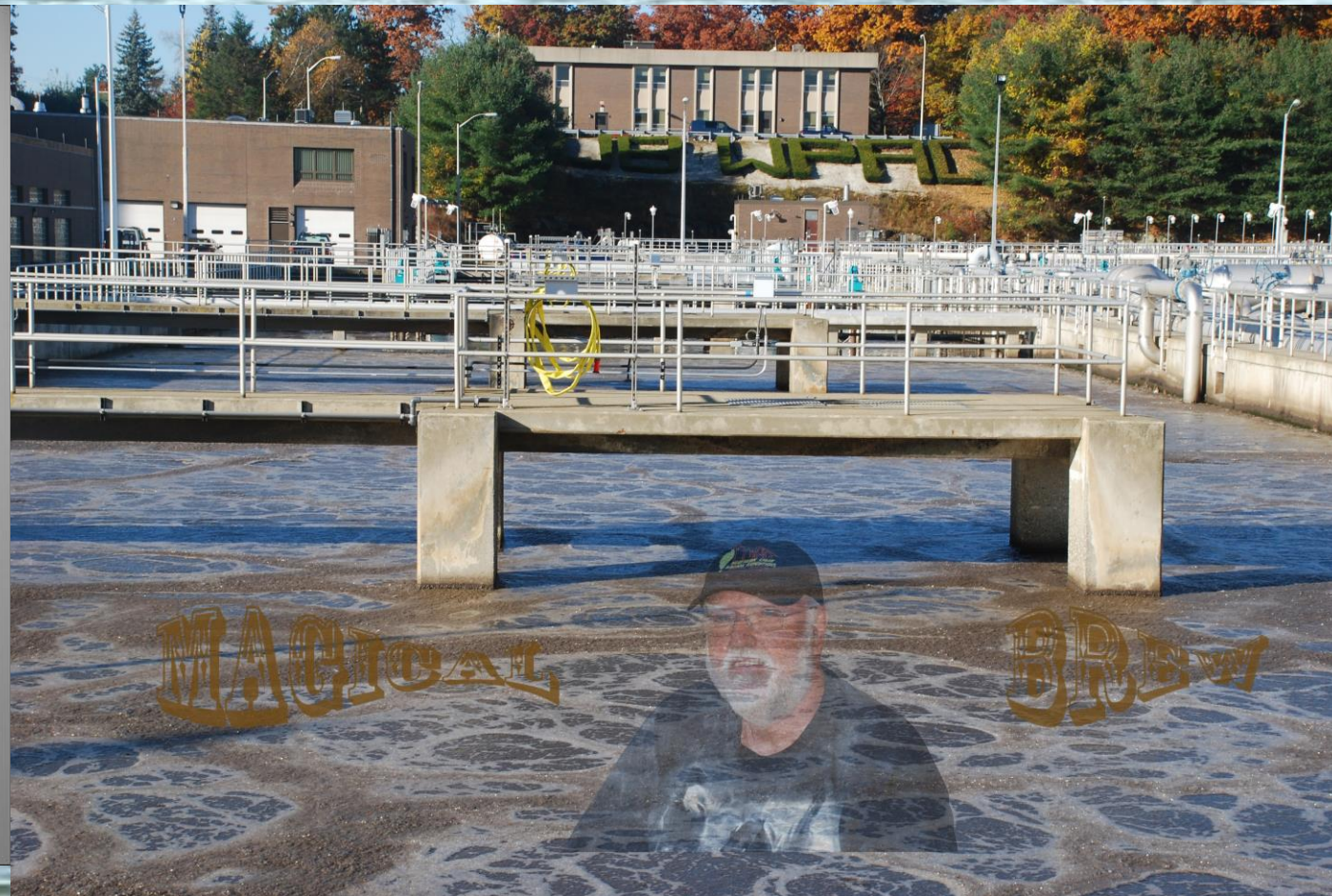
*NPDES Seasonal Limits*

*(Monthly Average)*

Flow	- 56MGD	• Copper	- 7.2 ug/l
CBOD	- 10 mg/l	• Zinc	- 91.3 ug/l
TSS	- 15 mg/l	• Cadmium	- 1.5 ug/l
Total N	- 5 mg/l	• Aluminum	- 87 ug/l
Total P	- 0.1 mg/l	• Chlorine	- 12 ug/l

mg/l = 1/1,000,000

• ug/l = 1/1,000,000,000



# Fifty Year Odyssey

## Rhode Island Operator Boot Camp 2008



# Fifty Year Odyssey

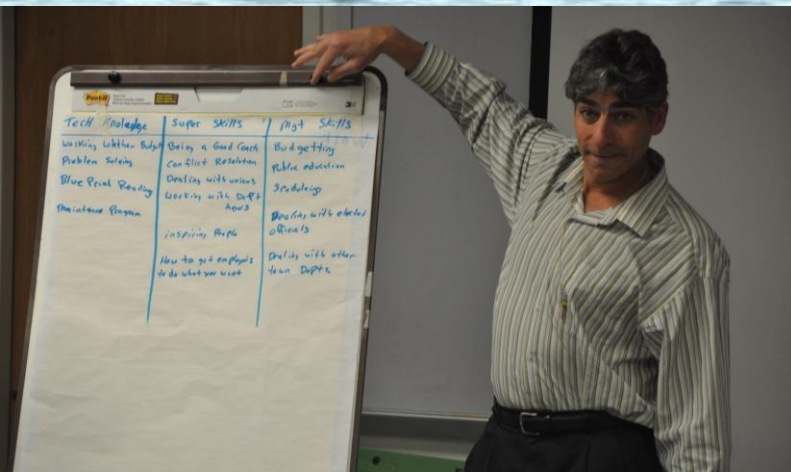
## WWTP Manager's Training Program





# Fifty Year Odyssey

## WWTP Manager's Training Program



# Life is good - retirement

