

VIII. APPENDICES

Appendix 1

FISH MORTALITY NOTIFICATION/INVESTIGATION LOG FOR 199 - Region

No.	Date	Investigators	Location	Source	Pollutant	Fish Kill Status

Appendix 2

SUPPLIES AND EQUIPMENT NEEDED

A. Available for Use During Field Investigation(s):

1. A copy of this manual.
2. A copy of your Region's contingency response plan and roster.
3. Topographical maps.
4. Camera and film.
5. Field notebook and fish kill investigation report forms.
6. Waterproof marking device(s).
7. Tags and/or labels (label tape) to identify collections.
8. Sampling containers for water and wastewater samples: plastic and glass (half gallon and/or gallon).
9. Aluminum foil.
10. Water sampler(s).
11. Plastic bags for fish samples.
12. Ice chest and ice.
13. Thermometer.
14. DO measuring capability (preferably a DO meter or kit for Winkler determination).
15. pH measuring capability (preferably a portable pH meter).
16. Chlorine measuring kit (DPD method) and other available field kits.
17. Hand lanterns.
18. Dip net and minnow seine.
19. Enamel pan (for observing macroinvertebrates).

Appendix 2 - continued.

20. Protective gloves.
21. Formaldehyde for preservation of fish and insects along with suitable containers (plastic vials and bottles).
22. Cutting instrument (for opening abdomen of fish).

B. Personal Gear:

1. Sun glasses (polarizing lenses).
2. Hip boots and/or waders.
3. Rain gear.

C. Available in Regional Office:

1. Access to secure refrigerator and freezer.
2. Lab pH meter, if field meter is not available.

Appendix 3

FISH KILL NOTIFICATION FORM

Complaint received by: _____

Date: _____ Time: _____

Caller's name (original complainant): _____

Address: _____

_____ Phone: _____

Other agencies notified or on scene: _____

FISH KILL DETAILS

When did the kill start? Date: _____ Time: _____

Is the kill over _____, or continuing _____?

Where is the kill? County _____ Town _____

Name of stream or lake _____

USGS Quadrangle _____

Extent of area affected. Miles _____ or Acres _____

Nature of the kill: Natural causes _____, or suspected toxicant or other suspicious circumstances (explain, including possible source, amount spilled, etc.)

Numbers of fish killed _____ Species _____

Additional information, followup, field inspection, etc. _____

Appendix 4

NYS DEPARTMENT ENVIRONMENTAL CONSERVATION
FISH KILL FIELD INVESTIGATION FORM
(use one form/station)

Investigator _____

Water _____ County _____ Date _____ Time _____

Location/Sta. No. _____

Water Conditions: _____

Clear _____	Foam _____	Water temp. _____
Turbid _____	Oil _____	pH _____
Muddy _____	Odor _____	D.O. _____
Color _____	Sludge _____	Other _____
Scum _____	Sewage fungus _____	

Water Sample(s): _____

Characteristics _____

Moribund fish sample(s) collected: Yes _____ No _____

Estimate of fish killed: _____

Species _____	Size range _____	Est. no. killed _____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Description of fish: alive _____ dead _____ distressed _____

Swimming movement _____

Whitish patches _____ sores _____ hemorrhages _____

Other remarks _____

Frogs (tadpoles), turtles: affected _____ nonaffected _____ none seen _____

Other remarks _____

Invertebrates killed: _____

Wildlife/waterfowl affected: _____

Appendix 5

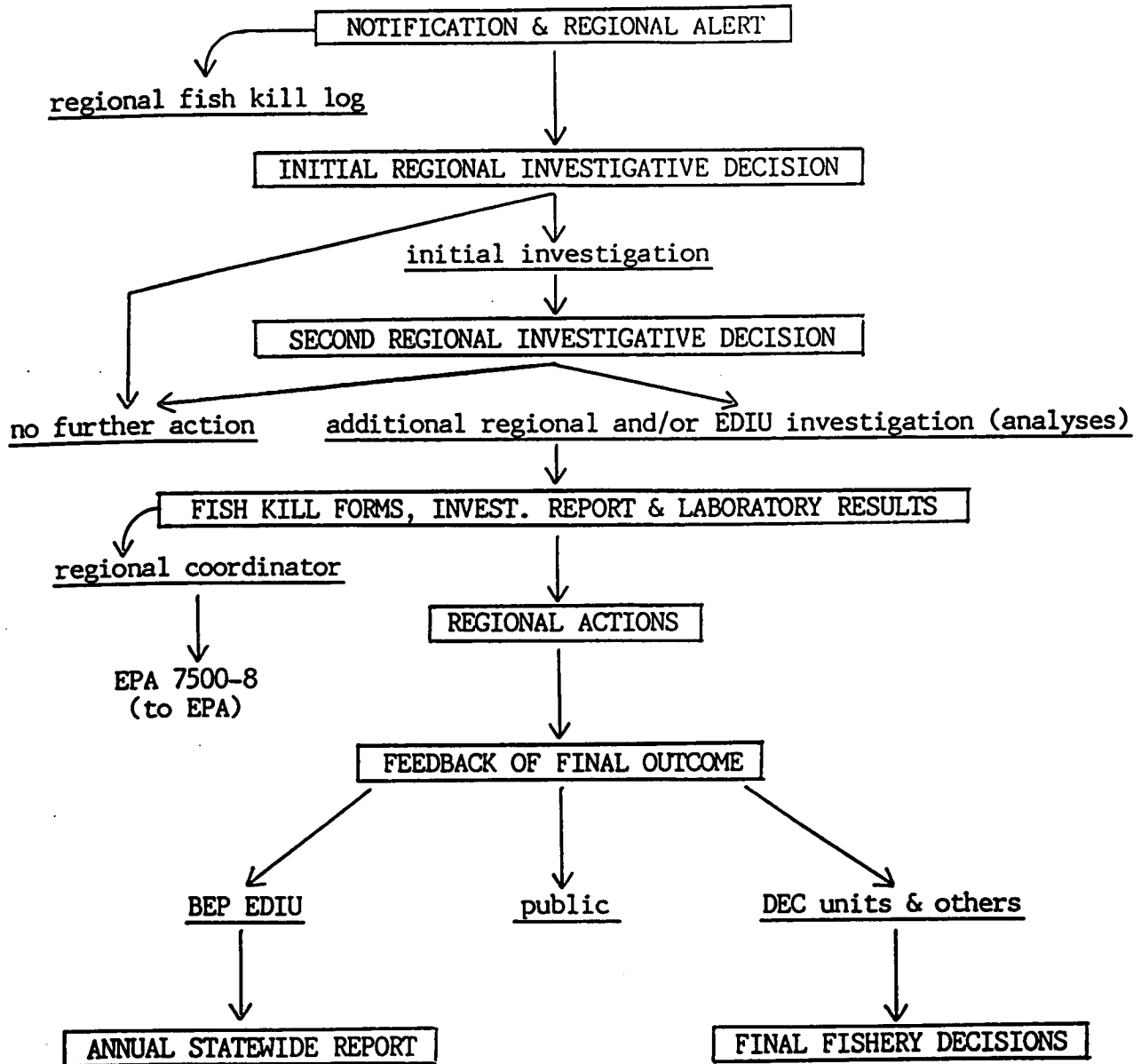
Form Approved OMB No. 2040-0087 Approval Expires 5-31-89

United States Environmental Protection Agency Washington, DC 20460		(For OWRS Use Only)		
Report of Pollution-Caused Fish Kill or Abnormality				
1. Location (Name of body of water, latitude/longitude)		2. Date of Kill or Abnormality		
3. Nearest Town/Range/Section/County	4. State/ZIP Code	5. Public Drinking Water Supply Affected? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Waterbody Type: <input type="checkbox"/> Impoundment <input type="checkbox"/> Estuary/bay <input type="checkbox"/> Stream/canal <input type="checkbox"/> Wetland <input type="checkbox"/> Ocean/gulf <input type="checkbox"/> Lake <input type="checkbox"/> Other (specify)		7. EPA River Reach Number (or, if unknown, USGS Hydrologic No.)		
8. Has a kill or abnormality been observed at this site before? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know				
9. Primary Land Use(s) at Site of Kill or Abnormality: <input type="checkbox"/> Agricultural <input type="checkbox"/> Industrial <input type="checkbox"/> Mining <input type="checkbox"/> Office/shopping <input type="checkbox"/> Residential <input type="checkbox"/> Silvicultural <input type="checkbox"/> Urban <input type="checkbox"/> Wildland <input type="checkbox"/> Other (specify)	10. Cause(s) of Kill or Abnormality: <input type="checkbox"/> Bacteria/viruses <input type="checkbox"/> Radionuclides <input type="checkbox"/> Cyanides and Phenols <input type="checkbox"/> Sedimentation/Silt <input type="checkbox"/> Inorganic Chemicals (Metals) <input type="checkbox"/> Temperature <input type="checkbox"/> Mixed Chemicals <input type="checkbox"/> Turbidity <input type="checkbox"/> Nutrients <input type="checkbox"/> Unknown <input type="checkbox"/> Organic Chemicals <input type="checkbox"/> Other (specify): <input type="checkbox"/> Oxygen Deficiency <input type="checkbox"/> Pesticides, Herbicides, Etc <input type="checkbox"/> Petroleum (Oil and Grease) <input type="checkbox"/> pH	11. Specific Pollutant(s)		
12. Source(s) of Pollution: <input type="checkbox"/> Agricultural Applications <input type="checkbox"/> Land Disposal-Municipal <input type="checkbox"/> Storm or Combined Sewer <input type="checkbox"/> Animal Feedlot/Waste Operations <input type="checkbox"/> Land Form Alteration <input type="checkbox"/> Transportation <input type="checkbox"/> Aquatic Weed Treatment <input type="checkbox"/> Land Treatment (Effluent Disposal) <input type="checkbox"/> Rail <input type="checkbox"/> Air <input type="checkbox"/> Truck <input type="checkbox"/> Barge or boat <input type="checkbox"/> Construction (Road/Bridge, Other) <input type="checkbox"/> Mine Drainage <input type="checkbox"/> Urban Runoff <input type="checkbox"/> Dredging <input type="checkbox"/> Pipeline Rupture <input type="checkbox"/> Unknown <input type="checkbox"/> Erosion <input type="checkbox"/> Power/Energy Discharge <input type="checkbox"/> Other (list) <input type="checkbox"/> Eutrophication <input type="checkbox"/> Power/Energy Intake <input type="checkbox"/> Industrial (Check Category in item 21 on reverse side) <input type="checkbox"/> Sewage Treatment, Advanced <input type="checkbox"/> Irrigation <input type="checkbox"/> Sewage Treatment, Primary <input type="checkbox"/> Land Disposal-Industrial <input type="checkbox"/> Sewage Treatment, Secondary <input type="checkbox"/> Silvicultural Operations				
Fish Kill	13. Type of Fish Killed	14. Estimated Total Number Killed:	16. Species Affected/Est. No. Each (indicate if rare/endangered)	
	Game _____ %	15. Severity <input type="checkbox"/> Total <input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input type="checkbox"/> Light		
	Commercial _____ %	17. Extent of Area Affected		18. Duration of Critical Effect
	Other _____ %	A. Miles of stream		B. Acres of lake
Total _____ 100%	19. Abnormality(ies) Observed: <input type="checkbox"/> Tumor <input type="checkbox"/> Disease <input type="checkbox"/> Lesions <input type="checkbox"/> Deformities <input type="checkbox"/> Eye disorder <input type="checkbox"/> Other (specify)			
20. Additional Remarks (include observed effects on other biota)				
Reporting Official		Agency Mailing Address	Date of Report	

EPA Form 7500-8 (Rev. 4-86) Previous editions are obsolete.

Obtain an original form for use or copying both sides. This copy is 80% of original size.

Appendix 6. FISH KILL INVESTIGATION FLOW CHART



Appendix 7

FISH/WILDLIFE CONTINUITY OF EVIDENCE
NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF FISH AND WILDLIFE

The following items: _____

were collected by _____

from _____ in the vicinity of _____

in the Town of _____, _____ County

on the date(s) of: _____, 19__.

Said items were in the custody of the persons listed below at all times until transferred to and hand delivered by those persons at times, dates and for purposes noted:

PRINCIPAL COLLECTOR (print name) TIME & DATE PURPOSE OF TRANSFER

SIGNATURE UNIT

FIRST RECIPIENT (print name) TIME & DATE PURPOSE OF TRANSFER

SIGNATURE UNIT

SECOND RECIPIENT (print name) TIME & DATE PURPOSE OF TRANSFER

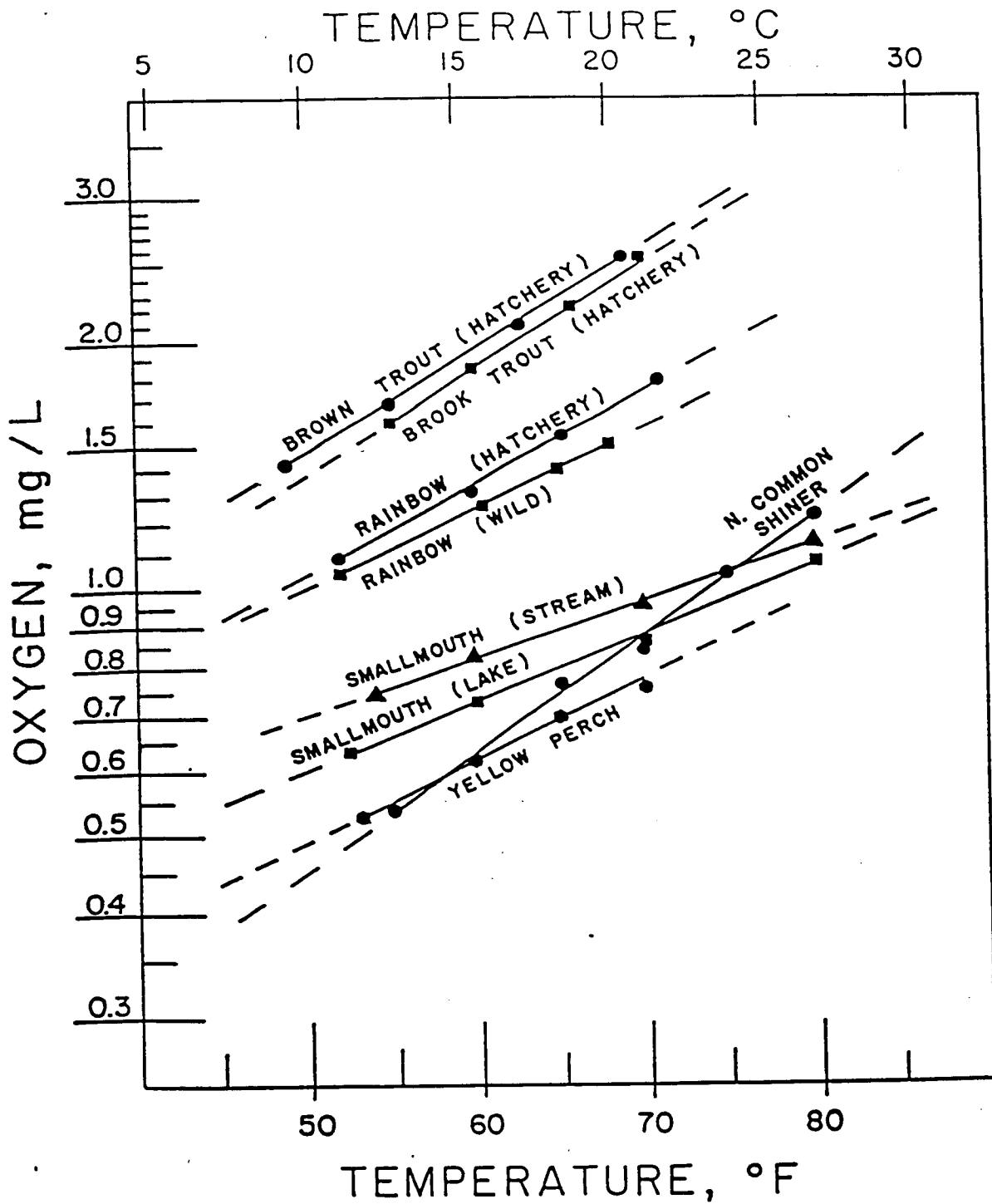
SIGNATURE UNIT

RECEIVED IN LABORATORY BY (print name) TIME & DATE

SIGNATURE UNIT

LOGGED IN BY (print name) TIME & DATE ACCESSION NUMBERS:

SIGNATURE UNIT



APPENDIX 8. MEAN LETHAL OXYGEN DATA
for SOME N.Y.S. FISH SPECIES⁴