Received
6/13/17

NEWBURYPORT WATER DEPARTMENT

P.O. BOX 880
NEWBURYPORT, MA 01950

TED ANGELAKIS
SUPT. OF WATER OPERATIONS

TEL. (978)465-4466
FAX (978)463-5684

June 1, 2017

U.S. EPA, Region 1
Office of Ecosystem Protection
PWTF Coordinator (OEP06-1)
5 Post Office Square, Suite 100
Boston, MA 02109-3912

RE: Notice of Intent, General Permit for Water Treatment Discharge - MAG640018

Dear Sir / Madam:

This letter shall serve as our notice of intent (NOI) to be covered under the General Permit coverage for water treatment facilities for discharge from our plant. The following is information as it pertains to our facility and discharge:

Owner:	Newburyport Water Works
Mailing Address:	City Hall Pleasant Street Newburyport, MA 01950
Telephone #:	(978) 465-4466
Facility Name:	Newburyport Water Treatment Plant
Address:	7 Spring Lane Newburyport, MA 01950
Telephone #:	(978) 465-4466
Contact:	Ted Angelakis, Superintendent
Telephone #:	(978) 465-4466
Number and Type of Facility:	1 - Conventional drinking water filtration plant
Facility Discharge Point:	Latitude, 42 deg, 49 min, 48 sec Longitude, 70 deg, 59 min, 20 sec
Receiving Water:	Merrimack River
Source of Water Treated:	Artichoke Reservoir

List of Chemicals Used	Aluminum Sulfate
At Water Treatment Facility:	Sodium Hydroxide 25%
	Sodium Fluoride
	Phosphoric Acid 75%
	Sodium Hypochlorite

By signing this letter, I certify that the discharge for which we are seeking coverage under the General Permit consist solely of effluent from discharge water from our water treatment plant.

Please contact me if there should be any questions in regards to this letter of intent for coverage under the General Permit.

Very truly yours,

Ted Angelakis

Ted Angelakis
Superintendent, Newburyport Water Works

cc: Water Office
DEP, Division of Water Pollution Control, NERO

APPENDIX IV

Notice of Intent Instructions and Suggested Notice of Intent Format

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY NEW ENGLAND - REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

Request for General Permit Authorization to Discharge Wastewater
Notice of Intent (NOI) to be covered by the General Permit

Potable Water Treatment Facility (PWTF)
NPDES General Permit No. MAG640000 and NHG640000

A. Facility Information

1. *Indicate applicable General Permit for discharge* (MAG640000) NHG640000

2. *Facility Data*

Facility Name Newburyport Water Works

Street/PO Box 7 Spring Lane City Newburyport

State MA Zip Code 01950

Latitude 42 deg 49 min 48 sec Longitude 70 deg 59 min 20 sec

SIC Code(s) 4940/4941

Type of Business Conventional water treatment plant sludge collection discharge

3. *Facility Mailing Address (if different from Location Address, above)*

Facility Name Newburyport Water Works

Street/PO Box City Hall, 60 Pleasant Street City Newburyport

State MA Zip Code 01950

4. *Facility Owner:*

Legal Name Newburyport Water Works

Email tangelakis@cityofnewburyport.com

Street/PO Box City Hall, Pleasant Street City Newburyport

State MA Zip Code 01950

Contact Person Ted Angelakis Tel # (978)465-4466

Owner is (check one): Federal_____ State_____ Tribal_____ Private _____

Other (describe)
Municipal

5. *Facility Operator (if different from above):*

Legal Name

Email

Street/PO Box_____ City

State_____ Zip Code

Contact Person_____ Tel #

6. *Currently (Administratively) Covered Under the Expired PWTF General Permit? (Please check yes or no):*

(Yes) No

a) Has a prior NPDES permit (either individual or general permit coverage) been granted for the discharge that is listed on the NOI? (**Yes**) No If Yes, Permit Number MAG640018

b) Is the discharge a "new discharger" as defined by 40 CFR Section 122.22? Yes (**No**)

c) Is the facility covered by an individual NPDES permit for *other* discharges? Yes (**No**)

If yes, Permit Number: _____

d) Is there a pending NPDES application (either individual or general permit) on file with EPA for this discharge? Yes (**No**)

If yes, date of submittal:_____ and Permit Number, if available _____

7. *Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water.* **See attachment**

B. Discharge Information (Attach additional sheets as needed):

1. *Name of receiving water into which discharge will occur*: Merrimack River

Check Appropriate Box: Freshwater (Marine Water)

State Water Quality Classification Class SB

Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) River

2. *Indicate the frequency of the discharge:*

Emergency Only Infrequent (Once/Twice a Year) Intermittent*** (Continuous)

Other***

***If Intermittent (i.e., occurs sometimes but not regularly as in batch discharge), provide # of days per year the discharge occurs _____
***If Other, explain _____

3. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the effluent limits and other conditions of the general permit.)
(This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses, etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving waters; and the length of backwash cycle for any combination of filters.)

Conventional water treatment plant filter backwash water is discharged to a 425,000-gallon equalization tank. The WTP backwashes one filter per day. Effluent from the equalization tank pumped back to the head of the WTP. Sludge collection is performed 4 times a day on average, but varies 2-8 times per day depending on the season. Solids from the sedimentation tanks are discharged to two 400,000-gallon lagoons. Clarified effluent from the lagoons is discharged to the outfall.

4. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).

See attachments.

5. Identify the source of the water being discharged:

(**Surface water**) Groundwater Other (describe)

6. Number of Outfalls 1 Latitude and Longitude to the nearest second for each Outfall. Attach additional pages if necessary.

Outfall #1 Latitude 42 deg 49 min 48 sec Longitude 70 deg 59 min 20 sec

Outfall # Latitude _____ Longitude _____

Outfall # Latitude _____ Longitude _____

7. For each outfall, indicate the proposed sampling location(s) for both effluent and ambient water (when applicable) and proposed consistent times of the month for collecting samples:

Outfall #1
Supernatant from the lagoons currently flows into one of two overflow structures, which are connected to the lagoon overflow drain pipe. Samples are collected once per week.

Outfall #
N/A

Outfall #
N/A

C. Effluent Characteristics

1. List here and attach additional information (on separate sheet) on any water additives used at the facility. This includes chemicals (including aluminum, iron, or phosphorus-containing chemicals) for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.

Sodium hypochlorite, Caustic Soda 25%, Aluminum sulfate, Phosphoric acid 75%, Sodium fluoride, Potassium permanganate, Clarifloc

2. Report any known remediation activities or water quality issues in the vicinity of the discharge

N A

3. Are aluminum compounds or polymers used as coagulants at this facility?*

Yes No

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on

10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

4. Does the facility use any alum-based products for algae control?*

Yes_ **No**

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

5. Are iron-containing coagulants used at this facility? Yes_ **No**

6. Does the facility's discharge contain residual chlorine? Yes **No**

[If Yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility]

7. Does the facility provide treatment to remove arsenic from the raw water source? Yes **No**

8. a. Are phosphorus-containing chemicals added to the treated water at this facility? **Yes** No

b. If answer to 8.a. is Yes, does the facility discharge to Phosphorus-Impaired waters? Yes No

c. If answer to 8.b. is Yes, provide name of P-Impaired waterbody: _____

9. Does the facility remove radium or other radioactive substances from raw water sources to comply with drinking water standards? Yes **No**

10. Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water
7Q10: 15.8 cfs

NOTE: For facilities that discharge in New Hampshire, the state permitting authority **must** be contacted at the address listed in Appendix VI of the PWTF GP to determine and/or confirm the 7Q10 and/or dilution factor. For facilities that discharge in Massachusetts, it is highly recommended to contact the relevant state authority (MassDEP) to determine and/or confirm the 7Q10 and/or dilution factor. Attach any calculation sheets used to support the stream flow and dilution factors. See Appendix VII for equations and additional information.

11. For *each* outfall, provide the following discharge information:

Outfall # 1

a) *Design Flow of Facility (in million gallons per day, MGD):* 4.2
This value will determine the facility's daily maximum flow limit, up to a maximum of 1.0 MGD.

b) *Discharge Flow (in gallons per day, GPD):*

Maximum Daily Flow 226,000 GPD Average Monthly Flow 111,000 GPD

c) *TSS (mg/l)*: Number of samples: 52 (2017 DMRs) (Minimum of 10 samples)

Maximum Daily 0 mg/l Average Monthly 0 mg/l

d) *pH (s.u.)* : Number of samples: 52 (2017 DMRs)(Minimum of 10 samples)
Minimum 6.1 s.u. Maximum 7.9 s.u.

e) *Total Residual Chlorine (ug l)*: Number of samples: N/A (Minimum of 10 samples)
Maximum Daily N/A ug/l
NOTE: TRC is only required for discharges which have been previously chlorinated or contain residual chlorine

12. The following section must be completed for any facility that answered "Yes" to Question III.C.3 or III.C.4 (e.g. adds an aluminum-containing chemical to the water being treated and/or discharged) **AND** was not covered under the previous PWTF GP (which expired on 10/2/14).

a) Collect, analyze and submit **12 effluent samples and 10 ambient surface water samples** from a location upstream of and not affected by the discharge. For facilities in New Hampshire and Massachusetts, each sample should be analyzed for total recoverable Al in micrograms per liter. All laboratory results shall be submitted on a separate sheet.
   - **a.** The samples shall be composite samples consisting of four grab samples taken at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water after the start of the backwash cycle.
   - **b.** For each sampling event, the effluent and surface water samples shall be collected on the same day and during a representative discharge event. The samples shall be no more frequent than weekly and, if time allows in completing the NOI, at monthly intervals and at different flow conditions. If taking the ambient water quality sample from lakes/reservoirs, the 10 samples should be composited vertically.
   - **c.** Discharge flow at the time of effluent sampling should be recorded. Flow conditions at the time of ambient water sampling should be recorded (or estimated from nearest gaging station).
   - **d.** Do not include dilution when recording the results.
   - **e.** See Section 2.1.2.3 and Footnote 12 of Section 2.1.1 for MA facilities (or Section 3.1.2.3 and Footnote 10 of 3.1.1 for NH facilities) for key information on minimum level for analysis and sufficiently sensitive test procedures.
   - **f.** Sampling data that was collected within one year of the effective date of this general permit AND that adheres to all of the requirements above may be submitted in lieu of new samples. This must be denoted with the submitted data.

b) Provide a description of control measures, chemical substitutions, waste handling methods, and operational changes evaluated and/or used by the facility to minimize the discharge of aluminum to surface waters. (Include additional sheet(s), if necessary)

_____

_____

_____

_____

_____

D. Endangered Species Act Eligibility Information

Using the instructions in Appendix III of the PWTF GP, which of the following criteria apply to your facility?

U.S. Fish and Wildlife Service (USFWS) Criteria: A **B** C

1. If you selected USFWS criteria B, has consultation with the U.S. Fish and Wildlife Service been completed?

   Yes No

2. If consultation with US Fish & Wildlife Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?

   Yes No

3. Attach documentation of ESA eligibility for USFWS as required at Part I.4 and Appendix III of the General Permit. **See attachment.**

4. For facilities seeking coverage under the Potable Water Treatment Facility General Permit for the *first* time, respond to the following questions to assist in ESA eligibility for NMFS:

   a) Indicate if the facility discharges into any of the stretches of the following rivers which can support or provide habitat to either Shortnose or Atlantic Sturgeon:

   N/A

Merrimack River (from Essex Dam in Lawrence, Downstream (including Haverhill) to mouth of River)	Yes	No
Connecticut River (from Turner's Falls, downstream through Holyoke (including Holyoke Dam region)	Yes	No
Taunton River	Yes	No
Piscataqua River (in NH)	Yes	No

   b) Has the facility had any previous formal or informal consultation with NMFS?

   Yes No

   If yes, attach the results of the consultation(s). **Documentation attached? _____**

E. National Historic Properties Act Eligibility

1. Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes (No)

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination?

Yes (No)

If yes, attach the results of the consultation(s). **Documentation attached? _____**

3. Which of the three National Historic Preservation Act scenarios listed in Appendix II, Section III have you met?

(1) 2 3

F. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any analytical data used to support the application. Attach any certification(s) required by the General Permit.

G. Signature Requirements

The NOI must be signed by the operator in accordance with the signatory requirements of 40 CFR § 122.22 (see below) including the following certification:

I certify under penalty of law that (1) the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility; (2) any chemicals used to treat the discharge have been identified in this NOI; and (3) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Ted Angelakis Date 4/19/18

Printed Name and Title Ted Angelakis, Superintendent

Federal regulations require this application to be signed as follows:

1. For a corporation, by a responsible corporate party;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at http://www3.epa.gov/region1/npdes/pwtfgp.html

H. "Opt-Out Request" from NetDMR Requirement

1. Check the box if you **are** applying for an "opt-out request." ☐

2. Provide a detailed explanation of the technical or administrative factors that support your request to "opt-out" from the requirement to submit DMRs and reports electronically. (Add additional lines, if necessary.)

_____

_____

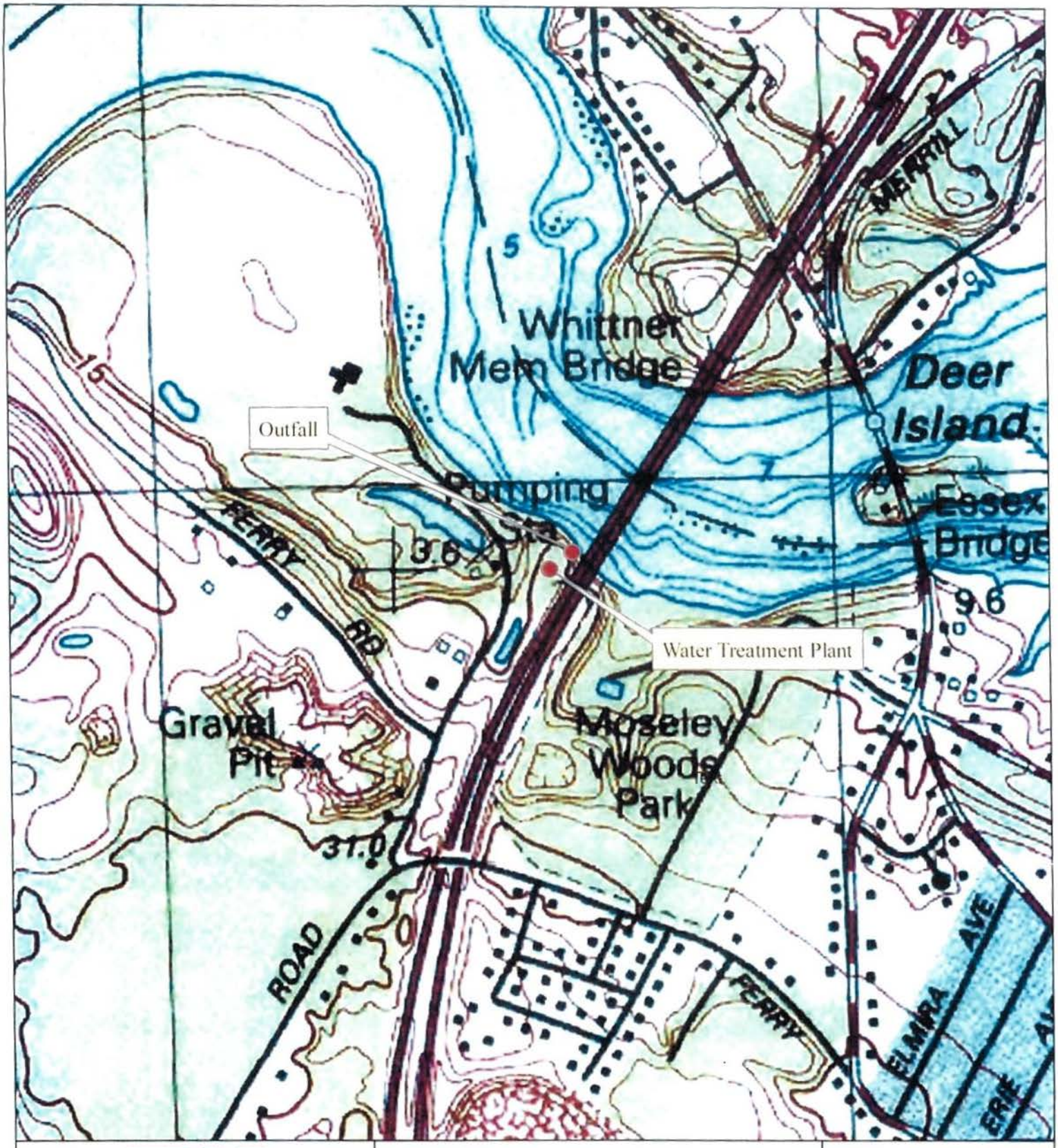
_____

_____

_____

Attachments

TATA & HOWARD



TATA & HOWARD

Date: April 2018 Scale: 1:7,500

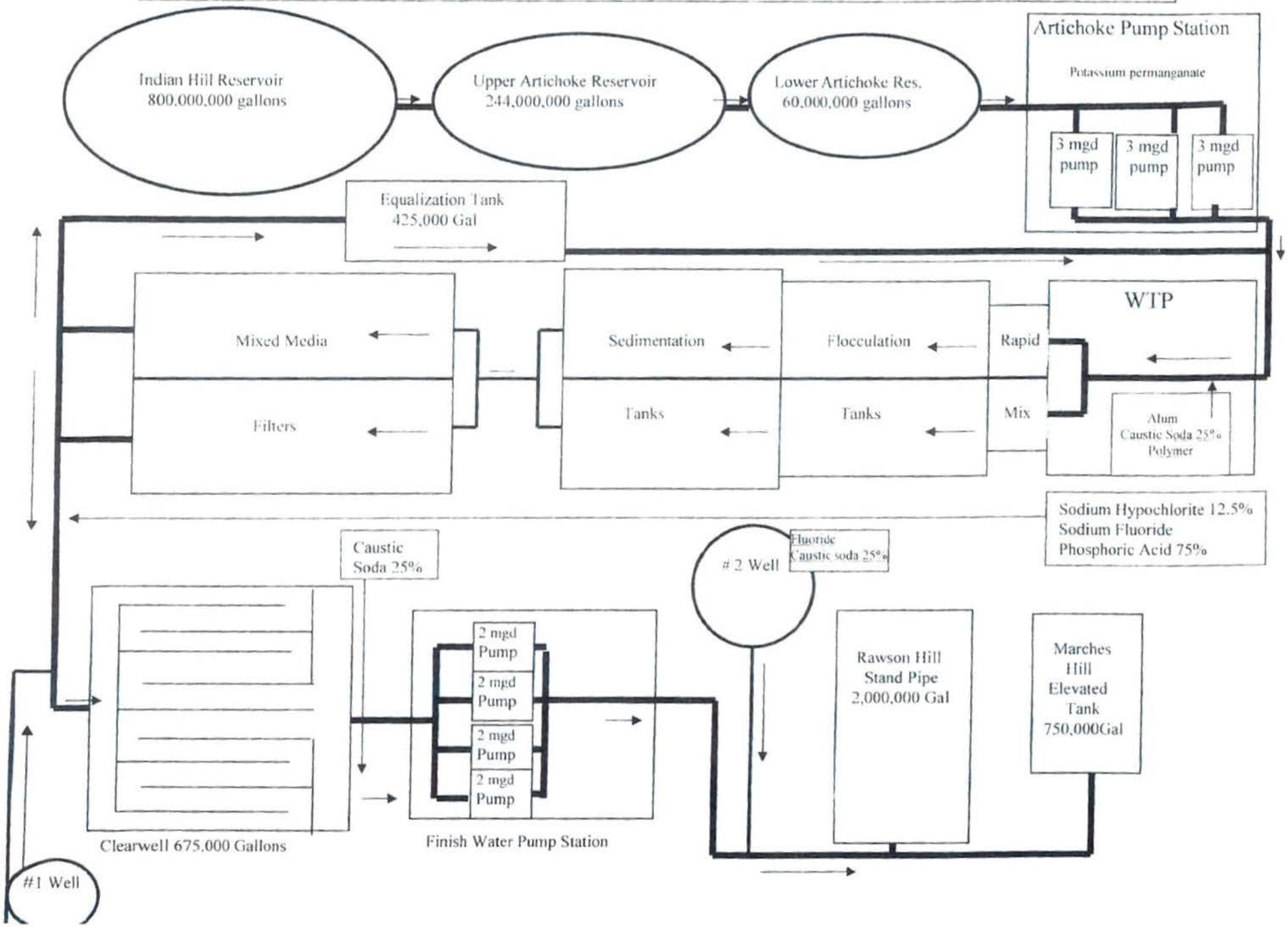
Locus Map

Newburyport Water Treatment Plant
Newburyport Water Works
Newburyport, MA

Figure No.

1

NEWBURYPORT WATER SYSTEM SCHEMATIC FLOW DIAGRAM



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930

August 08, 1995

Paul F. Colby
Supt. of Water Operations
Newburyport Water Works
City Hall, Pleasant Street
Newburyport, MA 01950

Dear Mr. Colby:

This is in response to your request for information on the effects of the discharge water from your water treatment plant on the endangered shortnose sturgeon (Acipenser brevirostrum) in the Merrimack River.

Shortnose sturgeon are present in the Merrimack River, spawning in the Haverhill reach and using other portions of the river as summering and overwintering habitat. They do not spend a large portion of their time in the saline reaches of the lower river. Based on the information you provided, the discharge water is not expected to have an effect on shortnose sturgeon in the Merrimack River.

If you have any further questions regarding this information, I can be reached at (508)281-9291.

Sincerely,

Laurie Allen Silva
Fishery Biologist