



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

MESSALONKEE STREAM HYDRO, LLC.) MAINE POLLUTANT DISCHARGE
OAKLAND, KENNEBEC COUNTY, MAINE) ELIMINATION SYSTEM PERMIT
COOLING WATER DISCHARGE) AND
OAKLAND (M2) HYDRO PROJECT)
ME0001163) WASTE DISCHARGE LICENSE
W000585-5R-I-R APPROVAL) RENEWAL

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S. §§ 411 – 424-C, *Water Classification Program*, 38 M.R.S. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251 *et seq.*, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the Messalonskee Stream Hydro LLC (permittee) for the Oakland (M2) Hydro Project with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On August 28, 2024 the Department accepted as complete for processing an application from MSH for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001163/Maine Waste Discharge License (WDL) #W000585-5R-H-R, which was issued by the Department on June 6, 2019, and authorized the daily maximum discharge of 48,000 gallons per day (gpd) of non-contact cooling water (Outfall #001) and an unspecified quantity of miscellaneous wastewater and stormwater runoff from (Outfalls #002 and #003) from the Oakland (M2) Hydro Project to the Messalonskee Stream, Class C, in Oakland, Maine.

PERMIT SUMMARY

This permit carries forward all the terms and conditions of the previous permit.

CONCLUSIONS

BASED on the findings in the attached PROPOSED DRAFT **Fact Sheet** dated January 7, 2026, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with State law.
3. The provisions of the State's antidegradation policy, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected.
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected.
 - (c) Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification.
 - (d) Where the actual quality of any classified receiving waterbody exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any waterbody, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the application of MESSALONSKEE STREAM HYDRO, LLC, to discharge a daily maximum of 48,000 gallons per day of non-contact cooling water at a temperature not to exceed 95 degrees Fahrenheit (Outfall #001) and an unspecified quantity of miscellaneous wastewater and stormwater runoff (Outfalls #002 and #003) from the Oakland (M2) Hydro Project to the Messalonskee Stream, Class C, in Oakland, Maine, as described above, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
2. The attached Special Conditions, including effluent limitations and monitoring requirements.
3. This [permit/license] becomes effective upon the date of signature below and expires at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act and Other Administrative Matters*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 C.M.R. ch. 2 § 20(A) (effective September 15, 2024)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ____ DAY OF _____, 2026.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
For Melanie Loyzim, Commissioner

Date of initial receipt of application: August 13, 2024

Date of application acceptance: August 28, 2024

This Order prepared by Rod Robert, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The discharge from Outfall #001 is limited to a daily maximum flow of 48,000 gallons per day and a daily maximum temperature of 95°F.
2. All miscellaneous facility leakage and lubrication waters that may become contaminated with oil or grease are subject to Best Management Practices (BMPs) designed to prevent the release of contaminants to the waters of the State. **Within 90 days** of permit issuance, the permittee must develop and update BMPs and must make the BMPs available in writing for Department review and comment upon request. BMPs may consist of, but not be limited to, the following, as appropriate: development and implementation of a spill prevention plan; use of oil absorbent pads or booms and/or physical berms to contain spills or leaks of hydraulic and lubrication oils; and the treatment of water collected in floor drains and sumps through an oil/grease trap or oil-water separator. Where bearing cooling water is used, BMPs must include the maintenance of a written log or record of bearing oil levels and maintenance activities. Where floor drains and sumps are used, BMPs must include (1) written procedures for the cleaning and maintenance of any oil-grease trap, oil skimmer or oil-water separator and (2) maintenance of a written log or record of visual inspections of sumps for oil and grease and of actions taken to prevent the discharge of oil or grease from the facility.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
3. The permittee must not discharge effluent that imparts color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their classification.
4. The permittee must not discharge effluent that lowers the quality of any classified body of water below such classification or lowers the existing quality of any body of water if the existing quality is higher than the classification.

SPECIAL CONDITIONS

C. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on August 28, 2024, 2) the terms and conditions of this permit; and 3) only from Outfalls #001, #002 and #003 identified in this permit. Discharges of wastewater from any other point source are not authorized under this permit and must be reported in accordance with D(1)(f), *Twenty-four-hour reporting*, of this permit.

D. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee must notify the Department of the following:

1. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance.
2. For the purposes of this section, adequate notice must include information on:
 - (a) The quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
 - (b) Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

E. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and based upon site inspections, additional site specific or any other pertinent information or test results obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to establish limitations or require additional monitoring, inspections and/or reporting based on the new information.

F. SEVERABILITY

In the event that any provision or part thereof of this permit is declared to be unlawful by a reviewing court, the remainder of the permit must remain in full force and effect and must be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **January 7, 2026**

PERMIT NUMBER: **ME0001163**

LICENSE NUMBER: **W000585-5R-I-R**

NAME AND ADDRESS OF APPLICANT:

**Messalonskee Stream Hydro, LLC
c/o HCE-Dodge Falls Inc.
55 Union Street, 4th floor
Boston, MA 02108**

COUNTY: **Kennebec County**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

**Oakland (M2) Hydro Station
25 Cascades Mill Road
Oakland, Maine 04963**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Andrew Locke
(617)-367-0032
alocke@essexhydro.com**

1. APPLICATION SUMMARY

On August 28, 2024 the Department accepted as complete for processing an application from MSH for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0001163/Maine Waste Discharge License (WDL) #W000585-5R-H-R, which was issued by the Department on June 6, 2019, and authorized the daily maximum discharge of 48,000 gallons per day (gpd) of non-contact cooling water (Outfall #001) and an unspecified quantity of miscellaneous wastewater and stormwater runoff from (Outfalls #002 and #003) from the Oakland (M2) Hydro Project to the Messalonskee Stream, Class C, in Oakland, Maine. See **Attachment A** of this fact sheet for a map showing the location of the facility.

2. PERMIT SUMMARY

- a. History: The most current relevant regulatory actions and or significant events include the following:

May 23, 1985 – The Department issued WDL #W000585-57-A-R for a five-year term.

December 23, 1998 – The Department issued global transfer #W000573-5R-C-T transferring WDL #W000585-57-A-R from Central Maine Power to Florida Power Light & Energy (FPLE).

February 22, 1999 – The Department issued WDL #W000585-5R-B-R for a five-year term.

January 12, 2001 – The State of Maine received authorization from the United States Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine.

December 23, 2003 – The Department issued global transfer order #W000585-5R-D-T, transferring WDL #W000585-5R-B-R from FPLE to Messalonskee Stream Hydro, LLC.

February 24, 2004 – The Department issued of combination MEPDES permit #ME0001163/WDL #W000585-5R-E-R for a five- year term.

March 13, 2009 – The Department issued combination MEPDES permit #ME0001163/WDL #W000585-5R-F-R for a five- year term.

June 10, 2014 – The Department issued combination MEPDES permit #ME0001163/WDL #W000585-5R-G-R for a five-year term.

June 6, 2019 – The Department issued combination MEPDES permit #ME0001163/WDL #W000585-5R-H-R for a five-year term.

August 13, 2024 – Messalonskee Stream Hydro LLC submitted a complete application to the Department to renew the June 10, 2014, permit. The application was accepted by the Department on August 28, 2024, and designated #ME0001163/WDL #W000585-5R-I-R

2. PERMIT SUMMARY (cont'd)

b. Source Description: The source of the discharge is a hydroelectric generating facility. The discharge consists of non-contact cooling water and minor miscellaneous discharges. The non-contact cooling water discharge flow rate is variable, depending on cooling needs, up to a maximum flow of 48,000 gallons per day (maximum cooling system capacity, based on information from applicant). The non-contact cooling water discharge occurs from a single outfall, Outfall #001.

Other miscellaneous discharges from two additional outfalls (Outfalls #002 and #003) from the facility consist of shaft lubrication waters, foundation leakage waters, and/or leakage from wicket gates and other equipment. In the event of unplanned leaks, spills or equipment failure, these discharges may become contaminated with hydraulic or lubrication oil and grease. See **Attachment B** of this Fact Sheet for a Flow Schematic of the facility.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 C.M.R. Ch. 530 (last amended March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. Ch. 584 (last amended February 16, 2020), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S. § 467(4)(E)(1)(a) classifies the Messalonskee Stream, from the outlet of Messalonskee Lake to its confluence with the Kennebec River, including all impoundments except Rice Rips Lake, as a Class C water. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465(4) describes the standards for Class C waters as follows.

4. *Class C waters. Class C shall be the 4th highest classification.*

A. Class C waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as a habitat for fish and other aquatic life

4. RECEIVING WATER QUALITY STANDARDS (Cont'd)

B. Class C waters must be of sufficient quality to support all species of fish indigenous to those waters and to maintain the structure and function of the resident biological community. The dissolved oxygen content of Class C water may not be less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply.

(1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:

(a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or

(b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

(2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

*Between April 15th and October 31st, the number of *Escherichia coli* bacteria in Class C waters may not exceed a geometric mean of 100 CFU or MPN per 100 milliliters over a 90-day interval or 236 CFU or MPN per 100 milliliters in more than 10% of the samples in any 90-day interval. The board shall adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.*

C. Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. For the purpose of allowing the discharge of aquatic pesticides or chemicals approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency to restore biological communities affected by an invasive species, the department may find that the discharged effluent will not cause unacceptable changes to aquatic life as long as the materials and methods used will ensure the support of all species of indigenous fish and the structure and function of the resident biological community and will allow restoration of nontarget species

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine Department of Environmental Protection 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the location of the discharge as Assessment Unit ID, ME0103000305_323R' Messalonskee Stream, Main stem, Class C. This segment is listed under the following category:

Category 2: *Rivers and Streams Attaining Some Designated Uses, Insufficient Information for Other Uses.*

Category 4-A: Rivers and Streams with Impaired Use, TMDL Complete. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, "All freshwaters are listed in Category 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL in December 2007. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury. However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory recommending limits on consumption for all freshwater fish. Maine has instituted statewide programs for removal and reduction of mercury sources."

The Department has no information that the discharge from MSH-Oakland, as permitted, causes or contributes to non-attainment of applicable water quality standards.

6. REGULATIONS RELATING TO TEMPERATURE

Regulations Relating to Temperature, 06-096 CMR ch.582 (last amended May 4, 1996), states that no discharge may cause the ambient temperature of any freshwater body to be raised more than 5 degrees Fahrenheit, nor must any discharge cause the temperature of any waters to exceed the USEPA national ambient water quality criteria established to protect all species of fish that are indigenous to the receiving waters. When the ambient temperature of any body of water naturally exceeds the applicable USEPA criteria, no thermal discharge may be allowed which alone or in combination with other discharges would raise the ambient temperature of the receiving water more than 0.5 degrees Fahrenheit.

The Department has established that cold water fish species are indigenous to all Maine rivers and streams. USEPA has established maximum temperatures for the protection of growth and survival of cold-water fish as follows: a weekly average temperature of 66 degrees Fahrenheit; and a daily maximum temperature of 73 degrees Fahrenheit.

7. ANTI-BACKSLIDING

Federal regulation 40 CFR, §122(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that except for provisions specified in the regulation, effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit. Applicable exceptions include (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance. All limitations in this permit are equally or more stringent than those in the previous permit.

8. ANTI-DEGRADATION

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause, contribute, or have a reasonable potential to cause or contribute to the failure of the water body to meet standards for Class B classification.

9. ISSUANCE OF NON-CONTACT COOLING WATER PERMITS

Although a MEPDES permit for a facility with regulated discharges would typically also need to include requirements under CWA § 316(b) for any associated cooling water intake structures (CWISs), Maine DEP's permits are not required to do so under the CWA because Maine DEP has not yet been authorized to administer CWA § 316(b). In 2001, EPA Region 1 authorized the Maine DEP to administer the NPDES permit program, except for the permitting of CWISs under CWA § 316(b). Because the state had not yet adopted legislation or regulations to implement CWA § 316(b) at the time of the Region's approval, Region 1 approved Maine's NPDES program on a partial, phased basis pursuant to CWA § 402(n)(4). Until this remaining portion of NPDES authorization is complete, Region 1 is responsible for making NPDES permitting determinations under CWA § 316(b), including where CWA § 316(b) applies and, in the situations where it applies, the resultant permit conditions. Until the state is authorized to implement CWA § 316(b), Maine DEP issues NPDES permits addressing all issues other than § 316(b) and Region 1 is responsible for issuing supplemental permits to address CWISs under § 316(b), if § 316(b) is applicable. Furthermore, there is no expressed or implied legal requirement that the permits be issued jointly or simultaneously.

10. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The USEPA has not promulgated National Effluent Guidelines for non-contact cooling water. The DEP has made a Best Professional Judgment (BPJ) determination that BPT for hydro project cooling water is no treatment, unless treatment to control thermal loading is determined to be required.

The Department has calculated that, under worst case conditions of maximum cooling water flow (48,000 gallons per day), maximum cooling water temperature (assumed 95 degrees Fahrenheit, based on staff analysis of industry data), and 7Q10 receiving water flow (15 cfs), and without any treatment to reduce thermal loading, the discharge will raise the ambient temperature of the receiving water by 2/10th of one-degree Fahrenheit. Therefore, the Department has determined that neither effluent limitations nor monitoring requirements are necessary to ensure that applicable water quality standards are met.

However, the discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S. § 414-A(1)(D). Within 90 days of permit issuance, the permittee must develop BMPs and must make the BMPs available in writing for the Department to review and comment upon requests.

11. PUBLIC COMMENTS

Public notice of this application was made in the Morning Sentinel on February 26, 2019. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Application Processing Procedures for Waste Discharge Licenses, 06-096 CMR ch. 522 (effective January 12, 2001).

12. DEPARTMENT CONTACTS

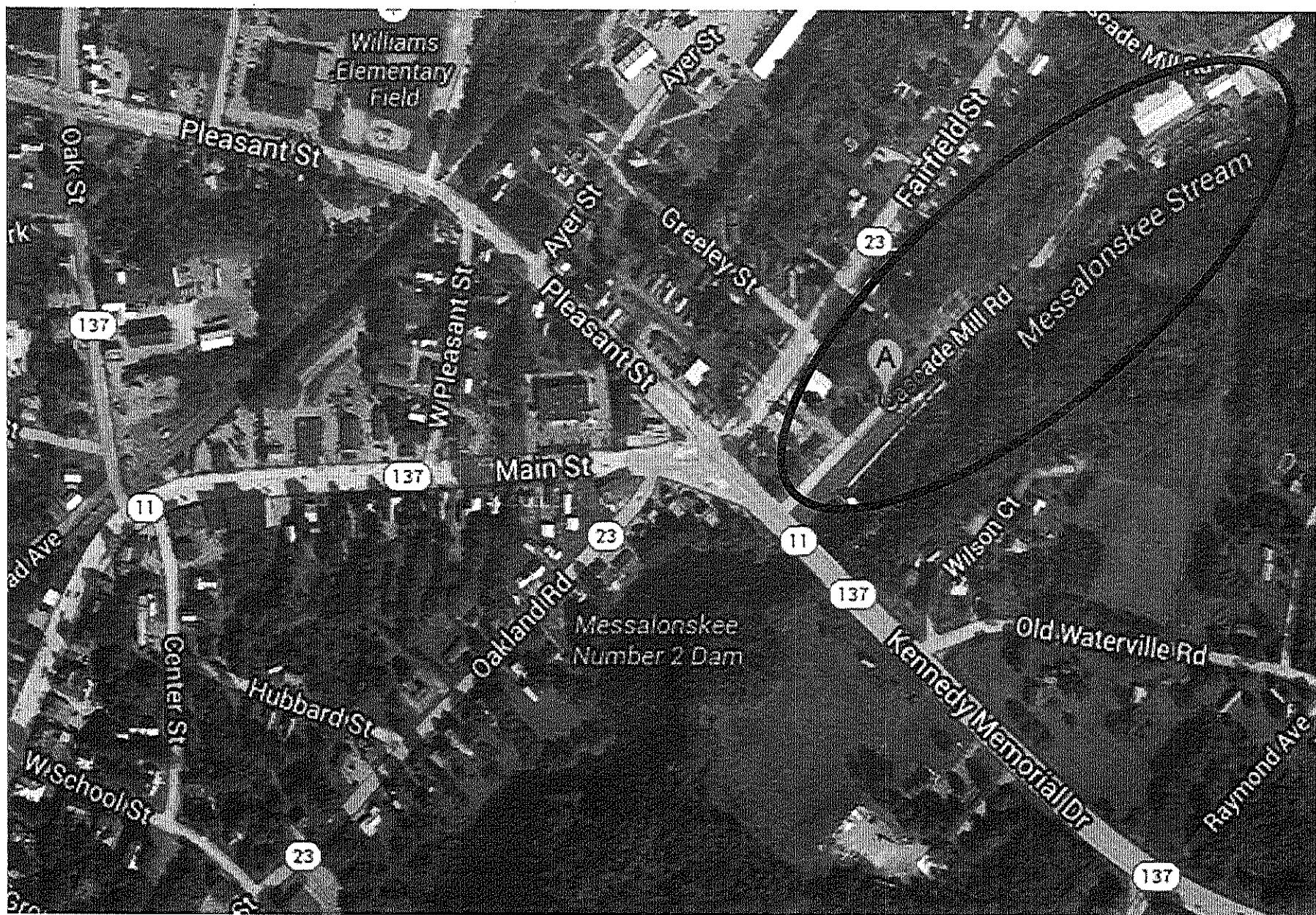
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

13. RESPONSE TO COMMENTS

Reserved until the end of the formal thirty-day comment period

ATTACHMENT A

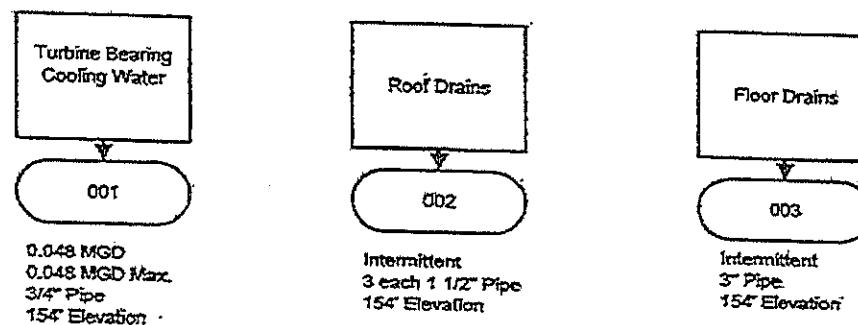
ME0001163 Attachment A- Location Map



ATTACHMENT B

Oakland Hydro Project

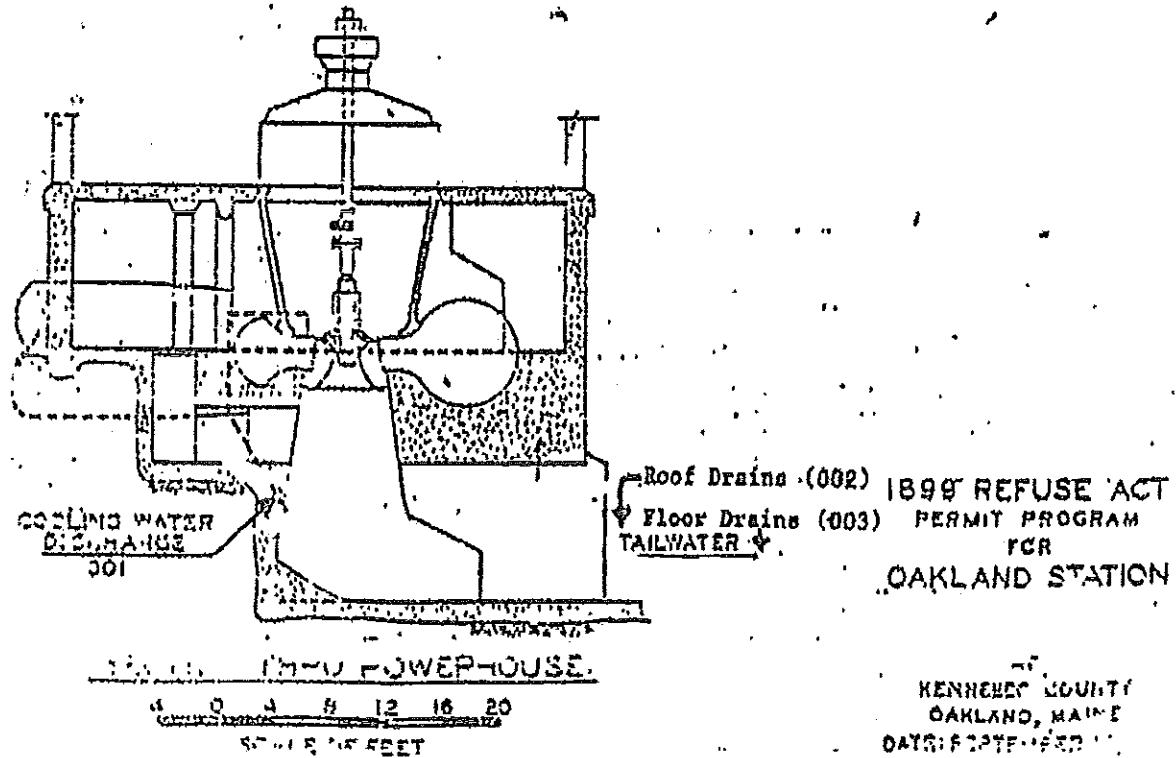
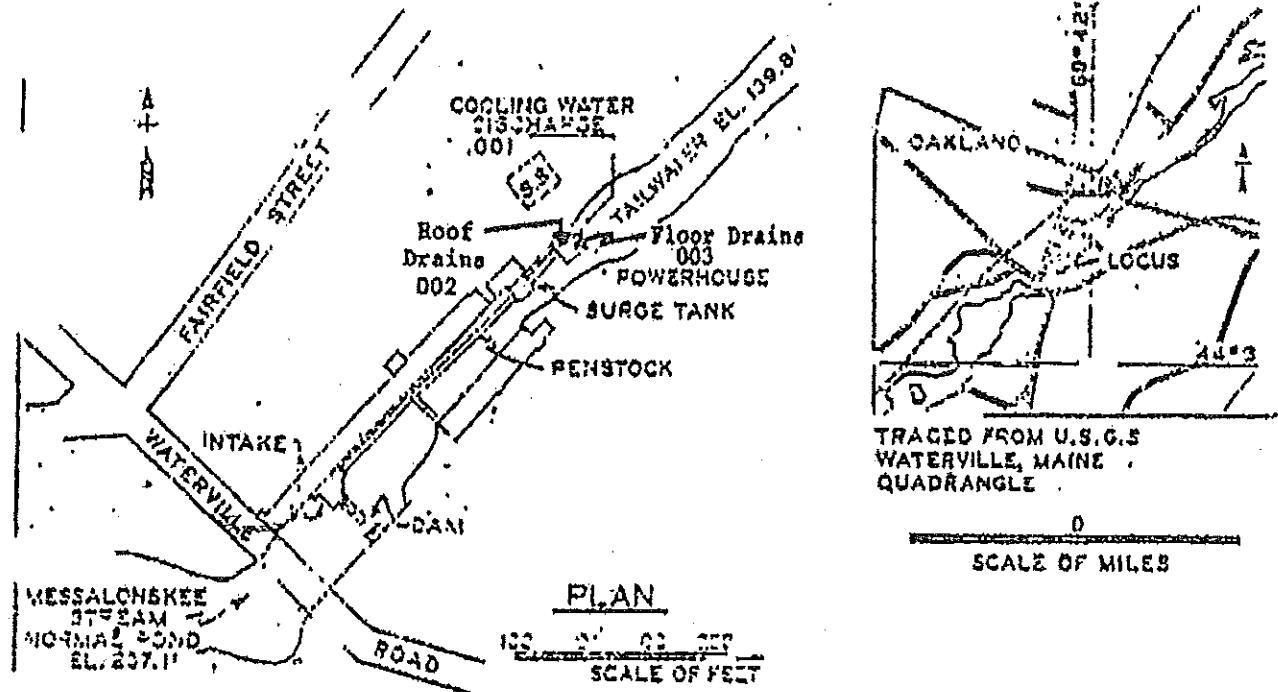
2013 Water Flow Diagram



Non-contact cooling water maximum flow is 0.048 MGD

Currently no sanitary facilities at this station.
Sanitary was an outfall that was discontinued sometime prior to 1980.

All transformers are located in the substation yard which is bermed. There is no outfall to the river.
Stormwater percolates to ground.



KENNEBEC COUNTY
OAKLAND, MAINE
DATE: 6/27/76