To All Interested Government Agencies and Public Groups:

In accordance with procedures established to evaluate projects which have applied for assistance under the New Jersey Water Bank, a Level 2 environmental review has been conducted for the proposed project described below:

**Project Name:** Hudson Avenue Sanitary Sewer Extension  
**Project Number:** Project No. S340488-08  
**Purpose of the Project:** The purpose of the project is to extend sanitary sewer services to residential properties located within the Crescent Cove section of the Borough of Hopatcong (Borough). The proposed project will address failing septic systems, private well contamination and potential environmental hazards associated with Harmful Algal Blooms (HABs). The project will provide capacity for the development of three (3) vacant residential lots.  
**Project Originator:** Borough of Hopatcong  
**Project Location:** Borough of Hopatcong, Sussex County  
**Project Description:** The Borough proposes to extend approximately 2,300 linear feet of sanitary sewer to 32 residential properties located along Hudson Avenue. Sewage will be conveyed via 8-inch diameter polyvinyl chloride (PVC) pipe to the existing Musconetcong River Regional Sewerage Authority. The proposed project will alleviate potential public health concerns due to failing septic systems that contribute to surface water runoff and possibly private well contamination.  
**Project Loan:** $600,000  
**Project Cost:** $600,000  

The environmental review of this proposed project indicates that no significant environmental impacts will result from the proposed action. This decision is based on a careful review of the
project report and other data submitted in support of the project. All documents submitted are on file at the New Jersey Department of Environmental Protection (Department), where they are available for public review. A copy of the Environmental Appraisal prepared by the Department for the proposed action is enclosed.

Based on the results of the environmental review, the Department has made a preliminary decision to assist this project under the New Jersey Water Bank. This decision allows the applicant to retain eligibility under this program, but is not a commitment of federal or state funds for the project. Comments supporting or disagreeing with this determination or the Environmental Appraisal may be submitted to the Department for review. All comments must be received within thirty days of the date of this letter. Please address your comments to Karen Cole, Chief, Bureau of Environmental, Engineering and Permitting, Municipal Finance and Construction Element, Mail Code 401-03D, P.O. Box 420, Trenton, New Jersey, 08625-0420. After evaluating any comments received, the Department will make the final decision at the conclusion of the comment period.

Very truly yours,

Eugene Chebra, P.E., Assistant Director
Municipal Finance and Construction Element
Division of Water Quality

Enclosure
ENVIRONMENTAL APPRAISAL

I. Project Identification

Project Name: Hudson Avenue Sanitary Sewer Installation
Name and Address: Hopatcong Borough
Of Applicant: 111 River Styx Road
Hopatcong, New Jersey 07843

Project Number: S340488-08
Project Location: Hopatcong Borough, Sussex County

II. Project Description

The Borough of Hopatcong (Borough) is located in the southeast portion of Sussex County, New Jersey. The Borough consists of approximately 12.25 square miles and has approximately 15,147 residents (2010 Census). A large portion of the Borough is undeveloped and lies within the Highlands Preservation Area while the remainder of the Borough has been developed with residential housing. Lake Hopatcong creates the eastern boundary of the Borough, and acts as the border between Morris and Sussex Counties. In Sussex County, the Borough is bordered by Stanhope Borough to the South, Byram Township to the West, and Sparta Township to the North. In Morris County, the Borough borders Roxbury Township to the South, and Jefferson Township and Mount Arlington Borough to the East (Figure 1).

The majority of the Borough is located within the upper Musconetcong River drainage basin which encompasses approximately 64 square miles in western Morris County and southern Sussex County. Most of the land area within the basin is underdeveloped, however, large areas of residential development are concentrated in the vicinity of major recreational lakes, particularly Lake Hopatcong and Lake Musconetcong. Historically, the lakeside communities were developed as seasonal resort areas during the early 1900s. These areas are now occupied year-round. The majority of the Borough’s population is concentrated within a densely developed area that represents one such lakeside community.

The only major existing domestic wastewater treatment plant located within the upper Musconetcong River basin is owned, operated and maintained by the Musconetcong Sewerage Authority (MSA). The plant is located in Mount Olive Township near the confluence of the Musconetcong River and Wills Brook. The MSA has a design capacity of 5.79 million gallons per day (mgd) and operates under New Jersey Pollutant Discharge
Elimination System (NJPDES) permit No. NJ0027821. The plant provides advanced treatment and discharges treated effluent to the Musconetcong River.

The Hopatcong Sewer Department provides sanitary sewer service to the majority of the Borough. The customers are primarily residential except for municipal facilities, schools and some small businesses. The system has approximately 3,000 active accounts, which include residential homes, businesses and public facilities. The Hopatcong Sewer Department currently provides service to its customers through a collection system consisting of more than 107 miles of pipe and four (4) pump stations. Additionally, there are over 925 individual grinder pumps with associated low-pressure sewers. The wastewater flow from the Borough is conveyed to the existing Musconetcong Regional Sewerage Authority Treatment Plant. Flow is ultimately discharged into the Musconetcong River.

Residents not connected to the municipal sanitary sewer system have on-site septic systems. All of the existing property owners on Hudson Avenue are on septic systems. The severe slopes and shallow rock make this area not well suited for individual subsurface disposal systems. These septic systems are in close proximity to a section of Lake Hopatcong known as Crescent Cove. These homes are also served by individual potable wells. Many of these properties do not have proper setbacks from the existing wells and septic systems. Recently, Lake Hopatcong has experienced issues with water quality, which has resulted in health and environmental concerns.

On June 27, 2019, the New Jersey Department of Environmental Protection (NJDEP) issued warnings to the public to avoid swimming in or contact with Lake Hopatcong water due to an extensive Harmful Algal Bloom, or HAB. Often referred to as blue-green algae, cyanobacteria are not true algae but are capable of excessive growth through photosynthesis. Exposure can cause a range of health issues, including skin rashes, allergy-like reactions, flu-like symptoms, gastroenteritis, respiratory irritation and eye irritation. The causes of the Lake Hopatcong bloom in 2019 is not fully understood. However, harmful algal blooms are generally fueled by nutrient-laden stormwater runoff followed by periods of hot weather that cause the proliferation of these bacteria, which are naturally present in waterbodies.

Primary sources of nutrients that can cause these blooms include septic systems, lawn fertilizers and animal wastes. The DEP urged property owners to fix any failing septic systems, have septic systems pumped out if this hasn’t been done for three to five years, use non-phosphorus fertilizers, clean up pet waste and keep leaves and other organic materials out of the streets. The DEP urged municipalities to take the following steps:

- Ensure stormwater treatment systems and devices are properly cleaned and maintained;
- Clean out storm sewer lines and catch basins;
- Conduct regular street sweeping;
- Actively work to identify any possible failing septic systems;
- Explore the viability of extending sewer service to areas served by septic systems.
The Borough of Hopatcong has determined that the sanitary sewer can be extended to the area along Hudson Avenue. The availability of sanitary sewer would alleviate the water quality and health concerns for these residents and improve the water quality within the Crescent Cove area of Lake Hopatcong.

The proposed project consists of the construction of approximately 2,300 linear feet of new sanitary sewer on Hudson Avenue (Figure 2). New SDR-21 Polyvinyl chloride (PVC) low pressure sewer pipe will be installed from house #130 to house #245 in the right of way. House #130 is already connected to the existing sanitary sewer system. All houses after #130 up to and including House #245 will be connected to the proposed sanitary sewer. The proposed sewer main alignment will predominantly follow existing public roadways and tie-in to the MSA at the terminal manhole across from house #245. A total of 32 houses will be connected to the proposed sewer along Hudson Avenue. Three (3) vacant lots are along the proposed sanitary sewer line and could potentially be developed. Sewer laterals will be installed for the 32 residential homes. Grinder pumps will be supplied to the homeowners for connection into the low-pressure sewer main. Significant rock excavation is anticipated as part of the sewer installation. When construction is complete and the road has settled for a minimum of six months, the entire road will be resurfaced.

III. Evaluation of Alternatives

A. No Action

Under this alternative, the septic systems along Hudson Avenue will continue to fail, posing an environmental and public health hazard. The shallow rock and steep slopes negatively impact the integrity of the existing septic systems which frequently create water quality and health concerns for the nearby Lake Hopatcong. The potential environmental, health and safety hazards would remain high. As a result, this alternative was not selected.

B. Construction of New Sanitary Sewer along Hudson Avenue (Selected Plan)

This alternative, as described in Section I, would involve the construction of 2,300 linear feet of 2.5-inch PVC sanitary sewer main, new manholes and 32 service laterals. The construction will reduce the occurrence of individual septic system failures that presents environmental, health and safety hazards and the potential to degrade water quality. As a result, this alternative was determined to be the most cost effective and environmentally sound alternative to address the sanitary sewer needs of the area and was therefore, selected.
IV. Environmental Consequences of the Selected Plan

A. Direct and Indirect Impacts

Water Quality and Hydrology

The proposed project will improve the water quality of Lake Hopatcong. Eliminating on-site, failing systems will ultimately improve lake degradation caused by cyanobacteria. The elimination of groundwater recharge from on-site systems may cause minor reductions of groundwater levels. The proposed sanitary sewer will reduce groundwater recharge from the existing septic systems, because the wastewater will now be conveyed to the MSA treatment plant. The impact will be offset by an improvement in groundwater and surface water quality, resulting from the removal of pollutants associated with on-site system effluent.

The project area is located within the Lake Hopatcong sub-watershed. This sub-watershed is within the Musconetcong River (Above Trout Brook) watershed of the much larger Upper Delaware River Basin Watershed Management Area.

Currently there is no known source of groundwater pollution in the project area and the proposed project will not create a potential source of groundwater pollution. Should groundwater be encountered during excavation, accepted dewatering methods as per current New Jersey Soil Erosion and Sediment Control standards will be used. The discharge of groundwater to the surface during construction will be temporary and minimal.

Water quality and hydrology will not be adversely impacted by the proposed project. No significant direct, long-term adverse impacts on water quality are expected and no significant point sources of water pollution will be created as a result of this project.

Storm drains and surface runoff channels located in the vicinity of the work area will be protected during construction in accordance with New Jersey Soil Erosion and Sediment Control Standards. In the event of a storm minor trench dewatering might be necessary. Water will be pumped from the trench into an enviro-bag to contain any sediment from the trench and allowed to percolate into the soil or slowly discharge along the existing curb line. There will be no direct discharges to any surface water bodies following.

Water is supplied to the residents of Hopatcong from individual potable wells. The proposed project is within the Musconetcong Sewage Authority sewer service area and is consistent with the Sussex County Wastewater Management Plan. All flow from the proposed project will discharge to the MSA, which has the capacity to handle the additional flow and is permitted to operate under NJPDES Permit No. NJ0027821. A Treatment Works Approval (TWA) permit No. 20-0107 was issued on May 4, 2020 for the construction of the proposed project.

The proposed project does provide capacity for new development, which has the potential
to increase nonpoint source water pollutants in stormwater runoff. There are three vacant lots that could possibly be developed and eventually connected to the proposed Hudson Avenue Sanitary Sewer main. There are several other vacant lots within the project area, however these lots, on the Northern side of Hudson Avenue, are severely impacted by excessively steep (greater than 30%) slopes. Nonpoint source water pollution problems in New Jersey are currently in the process of being addressed through a number of initiatives including watershed management planning.

Construction activities may result in some short-term impacts to surface waters and wetlands from soil erosion and sedimentation. These impacts will be avoided or minimized by requiring effective erosion control measures to be used during construction in accordance with the “Standards for Soil Erosion and Sediment Control in New Jersey” and the “Environmental Assessment Requirements for State Assisted Environmental Infrastructure Facilities (N.J.A.C. 7:22-10.11)”.

Whenever dewatering occurs in excess of 100,000 gallons per day, a temporary dewatering permit is required, and the quantity of water diverted must be reported to the Division of Water Supply and Geoscience’s Bureau of Water Allocation and Well Permitting. Although no dewatering is expected, if dewatering were necessary for this project, the dewatering effects could result in temporary and localized depressions of groundwater, which has the potential to affect the stability of structures located adjacent to construction. Stability of structures will be monitored if dewatering is found to be necessary. If problems were to arise, then corrective measure would be implemented immediately, and groundwater would return to normal levels following construction. Dewatering can sometimes contain silt, which can adversely affect environmentally sensitive areas such as surface waters and wetlands. If dewatering is deemed necessary, then control devices, such as settling basins for silt control, will be required to be in use during construction to remove sediment from dewatering prior to discharge.

A New Jersey Pollution Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) permit will be needed for any water from construction dewatering that may be discharged to surface water, regardless of the amount of water. Provided the discharge is not contaminated, the appropriate discharge permit will be the B7-Short term De minimis permit (see http://www.state.nj.us/dep/dwq/pdf/b7-rfa-checklist.pdf). This is determined by running a pollutant scan as described in the application checklist where the data can be collected up to a year in advance of the discharge. If, however, the analytical results demonstrate levels greater than the Attachment 1 standards as specified in the De minimis permit (see http://www.state.nj.us/dep/dwq/pdf/b7-deminimis-final-permit-5-20-15.pdf), the appropriate NJPDES discharge to surface water permit will be either the B4B-General Petroleum Product Clean-Up permit or the BGR-General Remediation Clean-Up permit (see http://www.state.nj.us/dep/dwq/pdf/sw-gp-chklst.pdf). Either of these permits can generally be processed in less than 30 days, although a treatment works approval may be needed for any treatment. Contact information can be found at the websites identified above.
Air Quality

As a result of construction of this project there may be some short-term impacts on air quality. These include increased vehicular emissions from construction equipment and generation of dust from earth-moving operations. These impacts will be temporary and localized. Further, these impacts will be minimized by requiring proper operation and maintenance of construction equipment and daily sweeping and wetting of the construction area for dust control.

No significant direct, long-term impacts on air quality are expected as a result of this project. No significant point sources of air pollution will be created as a result of this project.

The State of New Jersey has an ongoing State Implementation Plan (SIP) development process for air quality, which provides measures for the prevention of violation of the National Ambient Air Quality Standards (NAAQS). Current control measures focus on transportation strategies and industrial stationary sources. The NJDEP routinely collects, compiles, analyzes and summarizes Ambient Air Quality Monitoring Data from a number of air quality monitoring locations throughout the State of New Jersey. The proposed project is not anticipated to impede implementation of the control measures. New industrial/commercial facilities to be developed within the project service area will be required to comply with applicable air quality regulations. Therefore, this is consistent with the New Jersey State Implementation Plan for air quality.

To avoid adverse air quality impacts during short-term construction activities, compliance with the regulatory requirements of New Jersey’s Air Rules continue to remain in effect. Activities must still meet the State’s Air Pollution Control requirement, such as obtaining permits when necessary, adherence to idling limitations, implementation of all reasonable measures to mitigate dust and fugitive emissions from demolition and construction, and complying with all state and federal rules for demolition of structures, which may contain asbestos. The long-term and short-term greenhouse gas emissions as a result of this project will be small and are not anticipated to have a significant impact.

Noise

There will be some short-term, localized noise impacts during the construction period. These impacts are unavoidable but will be minimized by requiring construction vehicles to be equipped with proper mufflers, limiting the number of machines in operation, and limiting construction to avoid weekends and holidays. There will be no long term increases in noise impacts as a result of project implementation.

Cultural Resources

This project has been reviewed for its potential to affect significant cultural resources. No significant cultural resources have been identified previously in the project area. All construction will occur beneath paved roadways in disturbed soil or bedrock.
Therefore, it has been determined that the proposed project will not have an adverse effect on properties listed or eligible for listing on the New Jersey and National Registers of Historic Places. The New Jersey Historic Preservation Office was informed of this determination in a letter dated October 24, 2019, and has not provided any comments.

**Natural Resources**

Direct project construction impacts to areas with mature vegetation have been minimized by avoiding these areas to the extent practicable. The project will impact a total of 2 acres, including 1.26 acres of existing paved streets and the 0.74 acre paved utility easement where the underground treatment units and outfall will be located. The project will not impact any vegetation, wetlands/transition areas or park areas. No significant adverse visual impacts are expected in connection with this project.

All natural areas disturbed by the project, which will not be needed for continuing operation and maintenance, will be restored with like vegetation to the maximum extent practicable. This project will result in a negligible impact on the natural resources of the area. Should unanticipated tree trimming or removal become necessary, a general timing restriction on trimming or removal of trees from 4/1 – 8/31 is recommended to protect nesting birds covered under the NJ Endangered & Non-game Species Conservation Act.

**Environmentally Critical Areas**

The proposed project will not result in any direct or indirect adverse impacts to any Agricultural Development Areas, important farmlands, parks and preserves, designated wild and scenic rivers, flood hazard area or wetlands/transition areas. Thus, no significant direct or indirect adverse impacts are expected.

**Indirect and Cumulative Impacts**

The National Environmental Policy Act requires consideration of past, present, and reasonably foreseeable actions that may also affect area resources in addition to direct and indirect project impacts. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time frame.

The Borough has applied to the State Revolving Fund (SRF) program with numerous projects to improve clean water and drinking water quality. The most recent application for future funding is for the construction of a drinking water main along Hudson Avenue (Project No. 1912001-001). The short-term impacts associated with the installation of the drinking water main along Hudson Avenue will involve minor disturbance from construction activities.

Long-term impacts associated with the Borough’s proposed water quality improvements will result in an improved natural environmental and improved health of Lake Hopatcong.
Environmental Justice

The proposed project will provide improved recreational opportunities for the community. The improvements to water quality and the environment produced by the proposed project will positively affect the existing community and help to alleviate the environmental and health stressors in the community.

Wastewater Flow Projections

Currently, there are 32 homes along Hudson Avenue that utilize on-site septic systems. There are three (3) vacant lots along Hudson Avenue that could possibly be developed and eventually connect to the proposed sanitary sewer main. The approximate future flow that will be generated by the existing 32 homes is 9,600 gallons per day (gpd) (32 units x 300 gpd/unit = 9,600gpd). The potential future flow that could be generated if the vacant parcels are developed is 900 gpd (3 units x 300 gpd/unit = 900gpd). The anticipated future flow as a result of connecting all 35 potential parcels is 10,500 gpd. The MSA has agreed to accept this flow and has the capacity to treat the proposed flow.

Social and Economic Factors

The project is intended to serve a predominantly developed area. As the Department supports the award of financing to facilitate improvement of inadequate infrastructure to encourage development and the channeling of growth in areas of the State that have already been developed, funding of the proposed project is consistent with New Jersey’s smart growth objectives.

Construction of the proposed project will cause nuisances to residents as a result of noise, dust, traffic congestion and impeded access to residences. These impacts will be localized and temporary. The impacts will be mitigated as previously described for noise and dust. In addition, there will be requirements for maintaining access for homeowners and emergency vehicles.

The residents will be charged a one-time connection fee in the amount of $6,083 and then they will be charged an annual user fee of $1,200 per household. The homeowners will be responsible for the installation of the grinder pumps and sewer laterals, as well. In order to lessen the financial impact to the residents, the Borough has proposed a special assessment of approximately $8,600 ($6,083 connection fee and the cost of the proposed project) to be charged to the homeowners. As part of the special assessment, the homeowners are responsible to pay back this amount quarterly over the life of the loan.

The Median Annual Household Income (MAHI) for the Borough is $95,962. The annual user charge for sewer service of $1,200 is to be paid quarterly. This represents 1.25% of the MAHI and is therefore, not considered excessive.
B. Steps to Minimize Adverse Effects to the Environment

Siting of facilities to avoid important natural resources and critical areas to the greatest extent possible has been the main mechanism to ensure that there will not be any significant adverse impacts to the environment. In addition, the use of proper construction techniques and constraints will minimize and adequately mitigate any potential for adverse effects of the proposed construction on the environment. Included are:

♦ use of proper erosion and sediment control measures such as hay bales and mulching, in accordance with the “Standards for Soil Erosion and Sediment Control in New Jersey” and the “Environmental Assessment Requirements for State Assisted Environmental Infrastructure Facilities (N.J.A.C. 7:22-10)”;

♦ limiting the length of trench which may be open at any one time;

♦ dust control by wetting down and sweeping the construction sites. No chemicals will be used;

♦ noise control by requiring construction vehicles to have proper mufflers, limiting the number of machines in operation, limiting the hours of operation to normal working hours and limiting construction to avoid weekends and holidays;

♦ testing and treatment, as necessary, of dewatering to control silt or other contaminants that may be present;

♦ avoidance of vegetation along roadside alignments, limiting clearing to the areas absolutely essential for construction and operation of the project, and protection of specimen trees adjacent to construction areas with appropriate measures such as snow fencing or batter boards;

♦ restoration of vegetated areas temporarily disturbed during construction;

♦ avoidance of environmentally sensitive areas, such as wetlands, floodplains, and sites with mature vegetation, in locating stockpile, storage and erosion/siltation control measures;

♦ implementation of the protection and mitigation measures discussed in the “Natural Resources”, and “Critical Areas” sections of this document;

♦ scheduling of construction activities to minimize disruption of traffic flow;

♦ use of adequate safety measures associated with excavation, including marking with lights and signs and appropriate detours; and
ensuring that all necessary state permits are obtained prior to the initiation of construction activities.

V. Coordination of the Environmental Review

A. Public Participation

A public hearing was held by the Borough of Hopatcong on January 8, 2020 to receive public comments regarding the planning for the proposed project. Notice of this hearing was advertised in the Daily Record on November 15, 2019. Planning documents were made available to the public and public comment was invited. Based on a review of the hearing minutes, there were no unanswered questions regarding the proposed project. There were no objections to the proposed project. The Borough canvassed the residents who would be impacted by the installation of the new sanitary sewer. The Borough asked the residents to vote either For or Against the project. The majority of votes were in favor of the proposed sanitary sewer. The Borough, then, held another public hearing on February 20, 2020, to clarify and provide additional information regarding the project for which funding is being sought. Based on a review of the hearing minutes, there were no unanswered questions.

B. Agencies Consulted About the Project

- New Jersey Department of Environmental Protection
  - Bureau of Safe Drinking Water
  - Land Use Regulation Program- Highlands Preservation
  - Division of Water Quality
  - Division of Watershed Management
  - Bureau of Water Allocation
  - Historic Preservation Office
  - Natural Heritage Program

- Borough of Hopatcong

- Mott MacDonald

C. Reference Documents


4. Project correspondence

5. Transcript of Public Hearing
Figure 1
Borough of Hopatcong
Sanitary Sewer Extension
Sussex County, New Jersey
Project No. S340488-08
Figure 2
HUDSON AVENUE SEWER EXTENSION PROJECT
BOROUGH OF HOPATCONG
SUSSEX COUNTY, NEW JERSEY
Project No. S340488-08

SCALE: 1" = 1000'

NAD 83
STANHOPE QUADRANGLE