HAMMONTON LAKE MANAGEMENT PLAN

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Prepared for:
The Town of Hammonton
Atlantic County, New Jersey

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HAMMONTON LAKE MANAGEMENT PLAN

INTRODUCTION

This management plan was initially prepared in 1995 as a guide and reference for lake rehabilitation under the Implementation Phase (second phase) of the Hammonton Lake Restoration Program. Its objective is to identify key tasks designed to have a positive impact on tributary and lake water quality. In addition to describing these tasks, it provides both the frequency of each undertaking and the agency/governmental jurisdiction responsible for task completion. In 2016, the Hammonton Lake Water Quality Advisory Committee (“the Committee”) determined the original Plan was due for updating to reflect current governmental jurisdiction of certain key tasks and update some of the key tasks to reflect best management practices.

The Committee reviewed the Plan throughout 2016 and 2017, discussing its contents with key Town administration and elected officials, other key environmental municipal bodies, as well as the Principal and Regional Fisheries Biologists of the NJ Department of Environmental Protection. Opportunities were also provided to the public to provide feedback and recommendations for managing the Lake.

Ordinance No. 12-2007 established the Hammonton Lake Water Quality Advisory Committee May 21, 2007 (see Appendix “A”). The location and extent of the Hammonton Lake Watershed is displayed in Appendix “B”.

OBJECTIVE

As stated above, the overall objective of this management plan is to identify tasks which, when completed on a regular basis, result in long-term positive trends in lake water quality. This control and improvement of water quality is critical to the continued long-term utilization of the lake as the Town’s primary natural resource serving recreational, environmental, aesthetic, and fish and wildlife habitat functions.

TASK IDENTIFICATION

In order to clarify the specific tasks, agency/governmental jurisdiction responsible, and frequency of completion, the Committee has established the following list of priority tasks:

1. Public Communication
2. Waterfowl Control
3. Boating Restrictions
4. Sedimentation and Nutrient-Loading Control
1. PUBLIC COMMUNICATION

A. The Issue:

Because Hammonton Lake is central to so many of the town’s recreational opportunities and events, it is vital that there be an ongoing program of communication with the public regarding the Lake and the importance of maintaining its water quality.

B. Recommended Actions:

(1) In cooperation with Town Council and Town administration, the Lake Water Quality Advisory Committee will initiate a continuing public communication program, to provide sound advice to the owners of residential, commercial, and institutional properties, both on the lake proper and within the watershed, concerning the impact of specific practices on lake water quality. These practices are outlined in the Committee’s publication “The Ten steps” (see Appendix C), and may include, but are not limited to:

- overuse of fertilizers, pesticides and/or herbicides on lawn areas and landscape plantings;
- feeding and/or providing unsuitable habitats for waterfowl;
- use of public/private storm drains to dispose of chemical compounds, paints, thinners, oils, antifreeze, pesticides/herbicides, petroleum products, etc.;
- failure to remove and dispose of pet waste properly;
- the use of green infrastructure elements to reduce storm water discharge into the lake;
- basic dynamics of the lake, including species inhabiting the lake, general hydrological features of the lake (flow rate, geology, etc.), and bio-chemical aspects;
- economic, social, and environmental benefits of the lake, including availability for fishing, boating, etc.;
- results of annual and other testing of lake water quality; and
- bank destabilization/sediment erosion on properties fronting the lake and its tributaries.

(2). The Hammonton Lake Water Quality Advisory Committee will prepare a minimum of four (4) articles annually for placement in local news media identifying specific public education items, such as those listed, and relating them to lake water quality impacts.

(3). In February of each year, the Committee shall issue a notice to the owners of all property fronting on the lake advocating sound property management practices in the use of all chemical treatments (fertilizers, pesticides, herbicides, etc.) and warning of the potential adverse impacts of improper or overuse. The notice shall reference the 2011 New Jersey Fertilizer Law, and address the allowable dates of fertilizer treatment for lawns. (See Appendix “D” for fact sheet regarding the 2011 Fertilizer law.) The notice may address additional topics as deemed necessary.

(4). The Committee may take other steps to advance its public communication mission as opportunities arise.

2. WATERFOWLCONTROL
A. The Issue:

By Ordinance #27-1994 (Appendix “E”), the Town Council prohibited the continued feeding and general care of waterfowl which are attracted to the lake and its environs. Although no studies have conclusively documented the impact of waterfowl on lake water quality, waterfowl, particularly Canada geese, may be attracted to the lake’s otherwise-open beachfront. Flocks may leave considerable amounts of feces on the beach, thus reducing the beach’s aesthetics and utility to town residents.

B. Recommended Actions:

(1). Consistent with the provisions of Ordinance #27-1994, it will be the responsibility of the Hammonton Police to enforce waterfowl control.

(2). In newspaper articles, to be placed by the Hammonton Lake Water Quality Advisory Committee, the water quality issues related to waterfowl control should be emphasized along with the importance of denying long-term habitat opportunities to waterfowl.

(3). The Committee should take steps to determine how to identify more precisely the origin of fecal coliform strains found during annual lake water testing.

(4). The Committee should investigate non-lethal methods of discouraging waterfowl from gathering on the Beach area.

3. BOATING RESTRICTIONS

A. The Issue

By Ordinance #20-2007 (Appendix “F”) the Town Council prohibited the operation of boats on Hammonton Lake with any form of mechanical propulsion with the limited exception of electric trolling motors of no more than 10 hp.

Operation of boats with mechanical propulsion other than small electric trolling motors is a safety hazard because of the presence of significant areas of cedar stumps and submerged timber less than 1 foot below normal lake surface elevation. Moreover, the normal discharge of motor oil and fuel residue into the water from operation of motorized craft would have a deleterious impact on water quality.

B. Recommended Actions

It is the responsibility of the Hammonton Police Department to respond to reports of violations of this Ordinance, and to enforce the Violations and Penalties provisions of the Ordinance as adopted in accordance with the Department’s enforcement policies.

4. SEDIMENTATION AND NUTRIENT-LOADING CONTROL

A. The Issue

Sediment loading into surface waters accounts for one of the most common forms of adverse water quality impacts. It can occur in a number of ways; however, the impacts always affect water quality in an adverse fashion by:

- increasing turbidity or cloudiness of the water column;
• the reduction of dissolved oxygen levels; thereby reducing the habitat potential for fish and aquatic species;
• the reduction in lake depth and interconnection with natural springs or the groundwater interface which can supply freshwater to the water body; and
• functioning as a conveyer of other contaminants such as heavy metals, PCB, nutrients, fecal coliform, etc. into the lake proper where accumulation and ingestion into the food chain can occur.

B. Recommended Actions

(1). During the five-month period between April 1 and September 1 of each year, the Town Public Works Department or designated contractor shall sweep municipal streets within the watershed a minimum of once each month as required by law. In addition, more frequent inspection and follow-up cleaning may be required as climatic conditions warrant.

(2). The Town’s Principal Public Works Manager shall request the Atlantic County Public Works Department, which is responsible for the sweeping of County highways including those such as Egg Harbor Road, Moss Mill Road and Central Avenue within the watershed, to maintain a similar sweeping schedule, as required by law, on roadway segments within their jurisdiction.

(3). The Town Municipal Utility Department shall also be responsible for the inspection and cleaning as necessary of the ± 75 inlets situated on municipal streets within the watershed a minimum of once monthly between April 1 and September 1 of each year. The Town’s Principal Public Works Manager will coordinate with the Atlantic County Public Works Department and solicit their cooperation in maintaining the same schedule for inlets on County highways within the watershed.

(4). The Town Public Works Department shall inspect and repair as necessary the storm water inlets a minimum of monthly during the time frame of April 1 through September 1 of each year, and a minimum of bi-monthly (every two months) during the other months of the year. If questions arise as to the extent of the repair, a plan of corrective action shall be coordinated with the Town Engineer’s Office and the Atlantic County Public Works Department, when required.

(5). The lake is surrounded by native Pinelands and ornamental trees and bushes, which contribute to the attractiveness of the lake environs. During the fall, a large amount of leaves drop into the lake from the area trees. The uncontrolled build-up and decomposition of plant material in the lake may contribute to the eutrophication of surface waters. This process is cyclic and leads to the reduction of oxygen levels in lake waters concurrently with the build-up of decaying sediment. This sediment in turn provides a medium for accelerated plant growth and elevated nutrient retention. Such leaf deposition also leads to reduced utility of the lakefront by the many homeowners around this signature water body. A periodic drawdown of the lake’s water level would facilitate the removal of excess leaf deposits, particularly along the lakeshore and around docks.

Therefore,

a. The Hammonton Utility Department shall be responsible for maintaining and adjusting the downlake water control structure at the White Horse Pike in order to maintain the following drawdown schedule:

- Every other year, beginning in 2019, the lake shall be drawn down a total of 36” or as approved by the Lake Lowering Permit issued by NJDEP from its optimum surface elevation of 68.82 feet above mean high sea level, starting on or about January 5, and
the water should be brought back to normal level by March 15(refilling commences around February 21), if the NJDEP permit allows for incremental refilling).

b. The Hammonton Lake Water Quality Advisory Committee shall initiate the lowering process in alternating years by requesting concurrence of the Parks and Recreation Commission, then requesting the Town Council’s Quality of Life Committee to apply for a Lake Lowering Permit from the NJDEP, Bureau of Freshwater Fisheries, and to check the lake surface elevation after it has been raised.

c. The Committee shall provide timely notice to the public about the lake drawdown schedule, both to alert residents about changes in the lake’s appearance, and to provide lakeshore owners with sufficient lead-time to prepare for shore and dock area cleanup.

d. The Committee should also investigate the impact of lake lowering on lake-dwelling species, including species of fresh-water mussels. These mollusks are potentially important natural contributors to the lake water cleaning process, and should be protected from excessive exposure to predation and other impacts.

(6.) One apparently increasing source of sediment loading to the lake is from lawn refuse blown into the street by a growing number of landscape companies. As more and more residents hire out their property maintenance responsibilities, private companies have flourished. The overwhelming majority of these companies blow grass trimmings, excess fertilizer, etc., into the street rather than sweep or vacuum them up, resulting in more sediment-loading to the lake when storm water washes the refuse away.

a. The Committee should explore ways to reduce and even eliminate this source of sediment loading, in cooperation with area lawn services, Town Council, and others.

5. DATA COLLECTION/RECORDING

A. The Issue:

The status of water quality, both in the lake and in the supplying tributaries, is a dynamic that is expected to change in relation to both natural and human-induced changes within the watershed. Ongoing information related to quality and related tasks within this Program should be compiled and presented to Town Council on an annual basis. This information, in the form of an analytical report, should be the basis for recommended revisions to this Program.

B. Recommended Actions

(1). From time to time, the Committee shall take such measures as it deems necessary, with the approval of Town Council when required, to collect data relevant to understanding the quality and health of the Lake and its environs.

(2). The Lake Water Quality Advisory Committee shall compile all data necessary for preparation of an annual report on the lake’s water quality and general condition, based on a presentation to the Committee by the lake water testing intern. Committee will present testing results to the Town Council on an annual basis, along with recommendations for continued improvement to and/or maintenance of the Lake’s water quality.

(3). The Committee shall annually request and implement a program of lake water quality testing, using local academic and other resources as deemed most cost-effective while preserving the integrity of the
data to be collected. Data collection protocols shall be consistent from year to year to ensure long-term analytical impact and integrity.

6. AQUATIC PLANT CONTROL

A. The Issue:

If unchecked, the uncontrolled growth of aquatic plants and their subsequent decomposition may consume significant quantities of dissolved oxygen within the lake, reducing its potential for contact recreation and as a habitat for fish, amphibians and other aquatic life. On the other hand, a healthy aquatic environment requires a proper balance of appropriate vegetation to provide oxygen and habitat for lake-dwelling species.

B. Recommended Actions:

(1). The Town should conduct a program of herbicide treatment on the lake using the following schedule: one-half of the lake for each of two consecutive years, followed by two (2) years of non-treatment, as water conditions indicate. Given spraying of half of the lake in 2017, the second half should be sprayed in 2018. No spraying should occur in 2019 or 2020, to allow time to study the effects of 2017’s and 2018’s treatments as well as allowing the lake environment to “rest” preparatory to the 2021 treatment. All treatments shall be carried out by an applicator who shall have all appropriate licenses and certifications issued by the State Department of Environmental Protection, and in a manner that minimizes the danger to lake wildlife.

    a. While bladderwort has been the primary target of past herbicide treatments, other aquatic plant species should also be evaluated for inclusion in the program, as appropriate.

    b. In collaboration with the Town’s Parks and Recreation Commission and the Town Engineer and Business Manager, the Committee shall review applicable regulations at the time a treatment is being planned including contacting licensed applicators for current information. The NJDEP’s Pesticide Control Program shall also be contacted and the appropriate aquatic pesticide permits procured. This permitting will include notices to Town Council and other affected municipal agencies as well as detailed notices to property owners adjacent to the area(s) being treated as required by the NJDEP Permit.

(2). The Town and Committee shall also investigate the possibilities for non-chemical control of aquatic plant life, and take into consideration the value of plant cover and diversity for all lake-dwelling species.
APPENDIX “A”

ORDINANCE #12-2007

HAMMONTON CODE CHAPTER 6, ARTICLE VII

HAMMONTON LAKE WATER QUALITY ADVISORY COMMITTEE
ARTICLE VII.

Hammonton Lake Water Quality Advisory Committee

[Adopted 5-21-2007 by Ord. No. 12-2007]

§ 6-43. Name.

The name of the committee shall be the Hammonton Lake Water Quality Advisory Committee.

§ 6-44. Objective.

A. The committee shall have as its objective the revitalization and preservation of Hammonton Lake and enhancement of recreational, social and cultural activities associated therewith.

§ 6-45. Membership; terms of office; alternates; attendance by Recreation Supervisor.

[Amended 12-17-2007 by Ord. No. 35-2007]

A. The Committee shall be comprised of seven members and three alternates as follows, and all appointments shall be made by the Mayor, with confirmation of the Council, and officially begin January 1, 2008:

(1) One Class I member serving a four-year term.

(2) One Class II member serving a three-year term.

(3) Three Class III members serving two year terms.

(4) One member shall be a representative of the Parks Commission serving a one-year term.

(5) One member shall be a representative of the Environmental Commission serving a one-year term.

(6) Alternate No. 1 serving a four-year term.

(7) Alternate No. 2 serving a three-year term.

(8) Alternate No. 3 serving a two-year term.

B. The Chairperson and Vice Chairperson will be appointed by the Committee.

C. The Recreation Supervisor shall attend all meetings.
§ 6-46. Election of Chairperson; quorum; participation of alternates.

The Chairperson of this Committee shall be elected by a majority vote of the voting members. A quorum shall consist of seven members.* The three alternate members may participate in discussions of the proceedings but may not vote except in the absence or disqualification of a regular member.

*Quorum reduced to four members, per action of Council March 2018.

§ 6-47. Meetings.

Meetings shall be held as designated by the Chairperson of this Committee.


The rules contained in Robert's Rules of Order, Revised, shall govern this Committee.

§ 6-49. Secretary of Committee.

The Committee shall have a Secretary, who shall be compensated for his/her time by Mayor and Council.

§ 6-50. Functions.

The specific function of the Committee shall be as follows:

A. Study, implement and encourage actions consistent with the 1995 Hammonton Lake Management Plan.

B. Investigate appropriate measures to improve water quality to protect the indigenous flora and fauna associated with the lake.

C. Promote practices that eliminate point source pollution and minimize nonpoint source pollution impacting Hammonton Lake.

D. Educate residents of Hammonton and surrounding communities of actions they can take to improve the water quality of Hammonton Lake.

E. Encourage Town residents to fully utilize the lake for passive and active recreation such as swimming, boating, fishing, hiking, and ancillary activities such as picnics, playground use, Town holiday events, and the like.

§ 6-51. Recordkeeping.

The Commission shall keep records of its meetings and activities and shall periodically report to the Board of Park Commissioners and shall also make an annual report on or before the first day of January and submit the same to the Mayor and Council of the Town of Hammonton, which report shall be comprehensive and detailed, covering operations, receipts, disbursements and expenditures for the full year.
APPENDIX “B”

HAMMONTON LAKE WATERSHED
APPENDIX “C”

ORDINANCE #27-1994

“TEN STEPS TO KEEP HAMMONTON LAKE HEALTHY”
Hammonton Lake Water Quality Committee
Ten Important Steps to Help Keep Hammonton Lake Clean

1. Always curb your pets and pick up their droppings along the watershed. (Hammonton code #184.12)
2. Place leaves, grass clippings and trash on the homeowner’s side of the curb, not in the street.
3. Close lids to all trash containers and dumpsters. (Hammonton code #241.200)
4. Minimize fertilizer use and substitute 0 Phosphorus formulations on lawns around the lake.
5. Do not feed waterfowl along the lake.
6. Urge Town Council to keep the streets swept and clean out storm drains 2-4 times a year.
7. Lakefront property owners should clean their lots of trash, debris and old decks and watercraft.
8. Fishermen, boaters, bathers, and pedestrians should pick up trash in and around the lake
to help keep a clean environment.
9. Never dump, change, or discharge vehicle fluids in the streets or storm drains,
as it becomes a major contributor to the degradation of our lake.
10. Spread the word of the conservation efforts.
   Be proud that we have such a beautiful lake to call our own.

We sincerely appreciate your spirited cooperation in our efforts to secure the health of our lake for years to come.
APPENDIX D

2011 NEW JERSEY FERTILIZER LAW
Quick Facts: 2011 New Jersey Fertilizer Law

The New Jersey Fertilizer Law was conceived to protect all New Jersey surface and ground waters from impairment by minimizing nitrogen and phosphorus loading that may be derived from lawn fertilizer. Generally, excess nitrogen is a threat to coastal water (estuaries) quality while excess phosphorus is a greater concern for fresh water quality. Both nutrients are also important for plant growth and health.

This law:

• establishes statewide fertilizer standards, pre-empting the multitude of local municipal ordinances.
• requires professional fertilizer applicators to undergo training and become certified.
• limits the time that fertilizer can be used: fertilizer may not be applied during the “blackout dates” of November 15th – March 1st for consumers, and December 1st – March 1st for professionals.
• prohibits fertilizer application during or just before heavy rainfall, onto an impervious surface, or onto frozen ground.
• restricts the amount of nitrogen used per application as well as the total for the year:
  o Professionals: can apply no more than 0.7 pound of water-soluble nitrogen per 1000 sq. ft. per application, and the total nitrogen applied cannot exceed 1 pound of nitrogen per 1,000 sq. ft. per application. The annual total for all applications should not exceed 4.25 pounds nitrogen per 1,000 sq. ft.
  o Consumers: fertilizers products, when applied according to label directions, will apply no more than 0.7 pound water-soluble-nitrogen per 1000 sq. ft. per application, and the total nitrogen applied cannot exceed 0.9 pound of nitrogen per 1,000 sq. ft. per application. The annual total for all applications should not exceed 3.2 pounds of nitrogen per 1,000 sq. ft.
• restricts fertilizer content.
  o fertilizer sold as consumer/retail products must have at least 20% of its nitrogen content in slow-release form
  o fertilizers that contain phosphorous cannot be applied to turf except when:

    1) a soil test, no more than three years old, indicates the need for phosphorus;
2) establishing turf and vegetation for the first time;
3) repairing or re-establishing turf;
4) applying liquid or granular fertilizer under the soil surface, directly to roots; or
5) the fertilizer consists of manipulated animal or vegetable manure (organic sources). In this case, phosphorus can be included if no more than 0.25 pound of phosphorus per 1,000 sq. ft. is applied, when used according to instructions on the container.

• stipulates that fertilizer bag label language follows AAPCO standard for turf fertilizer label to avoid the issue of a NJ only turf fertilizer label.
• establishes buffers. Fertilizer containing nitrogen or phosphorus cannot be applied to turf within 25 feet of any water body, except where a drop spreader, rotary spreader with a deflector, or targeted spray liquid is used, then the buffer may be reduced to 10 feet. A professional applicator may apply one “rescue treatment” annually to turf in a buffer as per rules above.
• sets fines for noncompliance: $500 fine for the 1st offense and up to $1000 for the 2nd and each subsequent offense for professional applicators.
• exempts commercial farms and golf courses, except that no person, other than a certified professional fertilizer applicator or a person trained and supervised by the certified fertilizer applicator, may apply fertilizer to a golf course.

When will specific parts of the law go into effect?

• Effective Immediately: Sections 1: Definitions; Section 2: Prohibited fertilizer applications when: raining, on impervious surfaces, before March 1st or after December 1st or any time ground is frozen, and Section 9: Authorization for DEP in consultation with Department of Agriculture to adopt rules.
• Effective January 5, 2012 -One (1) year from date of signing, the bill will go into effect requiring: All professionals to be certified; Setting limits of nitrogen content to be used by consumers and professionals and banning the use of phosphorous without soil test.
• January 5, 2013 –Section 11 (label and content requirements) shall take effect two (2) years after the date of signing outlawing fertilizer products that do not meet the new content standards set by the law.

02/21/2011
Revised 05/04/2011
APPENDIX E:

WATERFOWL CONTROL
Article III.

WATERFOWL

[Adopted 9-12-1994 by Ord. No. 27-1994]

§ 82-28. Purpose.

It has been determined that the presence of large numbers of waterfowl, on and around the Hammonton Lake in the Town of Hammonton, causes a public health nuisance in and around said lake, including the Hammonton Lake Park, which is inimical to the health and welfare of the public. The purpose of this article is to prevent such conduct that may attract such waterfowl to the Hammonton Lake, including the Lake Park.

§ 82-29. Prohibited conduct.

It shall be unlawful for any person, association or corporation to:

A. Feed any waterfowl.

B. Create any condition or allow any congregation or congestion of waterfowl which:
   (1) Results in an accumulation of waterfowl feces or droppings;
   (2) Results in damage to flora or fauna on private or public property; or
   (3) Results in a threat or nuisance to the public health, safety or general welfare of the public.

§ 82-30. Waterfowl defined.

Waterfowl shall include those species of domesticated and undomesticated birds commonly known as swans, geese, ducks, gulls or other types of waterfowl.

§ 82-31. Enforcement.

This article shall be enforced by the following:

A. The Police Department of the Town of Hammonton.


§ 82-32. Notification.

A. The Police Department or other town officials of Hammonton, when advised of a violation to this article, shall give notice of the nuisance to the owner or occupant of the premises upon which the nuisance exists or the feeding is occurring. Notice shall be deemed sufficient if it shall have been served either personally or by mailing such notice through the United States mail. Mailed notice is to be deemed served upon proof that such notice was deposited in the United States mail, first class postage prepaid, and addressed, in the case of an individual, to their business address, residence address or such address as the records of the addressee shall reveal to be for tax purposes; or, in the case of a corporation, to the registered office of the agent of such corporation as revealed to be for tax purposes.

B. Such notice shall order nuisances to be immediately aborted and/or the feeding immediately stopped.
§ 82-33. Violations and penalties.

Any person or persons or corporation who continues to be in violation of the provisions of this article after being duly notified shall, upon conviction, be subject to one or more of the following: a fine of not more than $1,000, imprisonment for a period not to exceed 90 days or a period of community service not to exceed 90 days.
APPENDIX “F”

ORDINANCE #20-2007

HAMMONTON CODE CHAPTER 99

BOATS ON HAMMONTON LAKE
CHAPTER 99.

BOATS ON HAMMONTON LAKE

§ 99-1. Distance from bathers to be maintained.

No person shall paddle, row, sail or otherwise operate any boat, including, but not limited to, rowboat, sailboat, or recreation or fishing vessel, regardless of means of propulsion, closer than 50 feet of any person swimming or bathing in the Hammonton Lake.

§ 99-2. Boats with motors.

With the limited exception of an electric trolling motor generating less than 10 hp, no person shall operate on the Hammonton Lake any boat equipped with any form of motorized propulsion.


Each and every violator of any of the provisions of this chapter shall be, upon his or her conviction thereof, subject to one or more of the following: a fine of not more than $1,000, imprisonment for a period not to exceed 90 days, or a period of community service not to exceed 90 days, and the Judge or other proper officer having jurisdiction before whom such violator shall be convicted may impose such fine, penalty, term of imprisonment or community service as he or she may see fit, not exceeding the maximum herein fixed.