

SAVE OUR LAKES ALLIANCE3

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SAVING NATURAL TREASURES

RECOMMENDATIONS TO THE CITY OF REHOBOTH FOR ITS

2020 COMPREHENSIVE DEVELOPMENT PLAN

Save Our Lakes Alliance 3 (SOLA3) was founded in 2004 as a 501(c) 3, non-profit organization incorporated in Delaware. We are fully supported by donations from our generous community. Our mission is to protect, preserve, restore and maintain Silver Lake, Lake Gerar and Lake Comegys. SOLA3 works to improve the natural environment of these lakes by promoting good practices, policies and initiatives; supporting programs and projects that improve water quality and protect wildlife; and sponsoring educational programs on good stewardship practices.

Silver Lake and Lake Comegys are remnants of the alluvial flow that followed the receding glaciers of the last Ice Age. In 2004 the Delaware General Assembly adopted Concurrent Resolution No. 37 that declared “due to their natural features, the ‘Rehoboth Lakes’ are integral to the ambiance of Rehoboth Beach and, as the closest freshwater lakes in the nation in proximity to the Atlantic Ocean, are natural treasures” to Delaware and the United States.

In 2013 Delaware’s Historic Commission dedicated a marker that recognizes the historic importance of Silver Lake and Lake Comegys to the area. The Rehoboth Beach Planning Commission has recognized the lakes as being “at the heart of its [Rehoboth’s] social and economic vitality.”

Until the 20th Century, Silver Lake was a source of fresh water and, in the winter, ice to preserve food. Because of more than a century of urban development within its watershed, it has become a stormwater retention pond for the City of Rehoboth Beach, recharged through groundwater and rainfall. The extensive Rehoboth Lakes Report done in 2012 by Rehoboth’s Planning Commission, at the request of the Board of Commissioners, (but not adopted by the Board of Commissioners), provides some important data - notably that the more than 22 unfiltered stormwater pipes that discharge directly into the lake are fed by over 150 in-street drains throughout south Rehoboth, which consists of 126 acres of private and public property.

This results in contaminants from business (particularly restaurants), homes, lawns, streets and other impervious surfaces, as well as pet waste, being carried into the lakes by stormwater, creating unhealthy conditions for humans and an abundance of phosphates, nitrates and other conditions that has resulted in massive fish kills.

In exchange for nearby lands from the City of Rehoboth, the DuPont family created Lake Gerar in the 1930's, to turn wetlands into a proper fresh water lake. It too has become a stormwater retention pond with at least 9 storm drains flowing into the lake. SOLA3's initiative with the City of Rehoboth and DNREC in 2004 led to a major restoration of the lake. Unfortunately, the west end has deteriorated with fill in, sediment and pollution from dumping, requiring another costly restoration.

SOLA3 provided extensive comments in the City's 2010 Comprehensive Development Plan about these lakes, complimented the City on improvements to Lake Gerar, and offered recommendations for measures needed to improve Silver Lake. While our recommendations were approved in the final CDP, few have been adopted or acted on by the City, even though the approved CDP has the force of law.

Furthermore, there are a number of changing circumstances that have occurred since 2010 that must be considered, along with our prior recommendations, for inclusion in the City's 2020 CDP. They are:

1. In 2012-13 SOLA3 led an unsuccessful opposition to a building permit that allowed a home to be built on the shoreline of Silver Lake because the property owner claimed ownership into the lake for the required setback. At that time that we decided that we needed to resolve the long-standing question of who owns Silver Lake and Lake Comegys because the answer would be critical to our ability to accomplish our mission. Our extensive research found that the State has always owned the Rehoboth lakes. We presented our research to then Attorney Beau Biden in 2013. A few months later the State issued a decision that it agreed and that DNREC would be the regulatory agency for the State. Since then, we have been working with DNREC, Rehoboth Beach, Dewey Beach and Sussex County to develop a comprehensive management plan for the lakes.

While this is welcome news, DNREC's efforts to improve the lakes cannot be successful unless the City of Rehoboth takes seriously its responsibility to address the land-based pollution caused by Rehoboth using Silver Lake and Lake Gerar as stormwater retention ponds.

2. A new challenge for Rehoboth is the development within the city of big parcels of land that are over 5,000 square feet. Before issuing permits for such new developments, Rehoboth must assure that adequate protections are required for the natural environment, adjoining properties and the health of residents. This is an immediate concern, requiring amendments to the building code. They cannot wait years to be enacted, as the Planning Commission is currently in the process of reviewing applications for such large developments (for example, the Belhaven Hotel).

3. A circumstance that was not considered in the 2010 CDP is climate change, aka global warming, because at that time it was just beginning to surface as a threat to our natural environment, food production, clean water and human safety and security. Rising seas, part of climate change, can disrupt coastal communities and their economic activity.

Which brings us to the question, is Rehoboth prepared for the impact it will have on its citizens, public and private properties, businesses and environmental assets? We hope our recommendations to the 2020 CDP will help address this with effective solutions.

As requested by the Planning Commission, we will first provide SOLA3's accomplishments since 2010 through initiatives we have taken with DNREC, the City of Rehoboth, and our own projects directed to improving the lakes:

We will continue to participate in the development of DNREC's lakes' management plan, along with the City of Rehoboth, Dewey Beach, Sussex County, and the Army Corps of Engineers, which will determine regulations and solutions for improving water quality of Silver Lake and Lake Comegys.

In 2012, SOLA3 led a year-long opposition to a City permit that allowed a house to be built literally at the water's edge on Silver Lake. While that effort was unsuccessful, we did spur passage of a City ordinance requiring a 10' setback for building any structures on properties within the city adjoining Silver Lake and Lake Gerar.

With the participation of SOLA3, the City adopted an ordinance requiring contractors/developers to use best management practices (BPMs) at construction sites to contain runoff to reduce the amount of harmful substances entering the lakes.

After lengthy discussions with SOLA3, DNREC dredged the west end of Silver Lake to remove accumulated sediment. This project improved its ecosystem, reduced health hazards for residents, and helped control the level of the water. This initiative was adopted in the 2010 CDP, to be done and funded by Rehoboth. But when the State acknowledged ownership, they took on the project and paid for it, sparing the City the \$100,000 it had committed to the project.

Again, after lengthy discussions with SOLA3, DNREC installed two large storm drains (fed by 29 other storm drains) entering Silver Lake at Stockley Street and Laurel Street, paid for by a state grant.

SOLA3 worked with the City to have DNREC and DELDOT restore 425 feet of Silver Lake Shoreline owned by the City, at the intersection of Prospect St. and East Lake Drive, and repair the eroded roadway.

Also, SOLA3 worked with the City to have a natural riparian buffer installed along the shoreline of the City's Stockley Street Park.

SOLA3 sponsored the design and production of an educational sign to discourage feeding of wildlife –“Keeping Wildlife Wild” – installed around the lakes by the City staff.

We received the 2012 Governor's award for outstanding volunteer leadership for an environmental organization.

We sponsored 11 workshops to educate the public on how to be good stewards of the lakes.

SOLA3 sponsors community-wide clean ups on and around Silver Lake and Lake Comegys, as conditions warrant. (Ongoing)

SOLA3 created its annual Conservation Award for outstanding efforts to improve the health and natural environment of the three lakes. The Award was bestowed for several years, until it was replaced with the Lakes Improvement Matching Grant.

Our Lakes Improvement Matching Grant is designed to promote the health of Rehoboth's three lakes through qualifying projects and practices (identified at www.sola3.org). The competition will award an annual total of \$3,000 to the winning applicant(s). Properties bordering the lakes, and beyond, are eligible.

We worked with Delaware's Historical Commission to create Rehoboth's first historical marker, cosponsored by Speaker Schwartzkopf and Senator Lopes, dedicated to Silver Lake and Lake Comegys.

SOLA3 cosponsored “Rehoboth Beach as a Sustainable Community—How to Preserve the Uniqueness and Address Issues that Come from its Success,” featuring noted urban planner Ed McMahon.

Through our annual newsletter and web site, as well as working with the media, we inform the public about our activities and provide useful information on how they can be good stewards of their environment.

SOLA3 RECOMMENDATIONS FOR THE CITY OF REHOBOTH BEACH'S 2020 CDP TO IMPROVE AND PROTECT THE LAKES*

The City shall develop a comprehensive stormwater management plan (unfinished from CDP 2010 and CDP 2015). A comprehensive plan will allow better prioritization of City fiscal resources toward its most significant issues. Many components of a plan have been, or are being completed, but a comprehensive plan would tie them all together and fill in the voids.

Such a plan must include:

(a) the installation of appropriate filters, stormceptors, sediment and trash traps in existing and new storm drainpipes, and perforated pipes for new storm drainpipes to allow stormwater to infiltrate back into the ground. Funding can be sought through State and Federal grants [GHD Report, May 2016]

(b) remediation of the stormwater infrastructure in the many areas of the City where it is inadequate to handle severe rain events, leading to large pools of standing water and some basement flooding. Also, Bayard Ave. is an undersized basin; a preliminary engineering report prepared by a consultant to the City indicated potential upgrades to that system.

The City shall continue the stormwater system cleaning and assessment program until the entire system has been inspected, repairs prioritized, and the system rehabilitated and integrated into the comprehensive stormwater management plan.

The City should seriously consider creating a stormwater utility, with 1) a dedicated funding stream and 2) a dedicated staff to oversee stormwater issues.

The City shall first determine the source of the high bacteria flowing into the lakes and ocean from stormwater and adopt appropriate ordinances and policies to provide the resources to minimize and/or eliminate higher than acceptable (by DNREC standards) levels of the bacteria that cause beach advisories to be issued.

The City shall adopt an amendment to Chapter 102 of Building Code to require timed inspections and monitoring BMPs at construction sites for sediment and erosion control, issue a stop order when not in compliance and allow 5 days for repairs for those not in compliance, and impose a daily fine for those who do not make repairs after 5 days. Staff time to oversee this should be funded through added cost for a building permit.

The City shall adopt an amendment to Section 105.8 of the City code to implement practices to reduce stormwater runoff caused by transporting construction and demolition site wastes from construction sites that may contaminate surface or ground water; and in the event of a spill, control the source of the spill, remediate and properly dispose of hazardous substances. It shall require that the site will be monitored by City and if found to be not in compliance, the City will issue a stop order and the contractor will have 5 days to be in compliance. After 5 days, the City will impose a daily fine while not in compliance. Staff time to oversee this can be paid for by funded through added cost for a building permit.

The City shall adopt an ordinance that amends the Building Code to require that rain water and water from lawn watering systems, which carry contaminants and

silt into stormwater drains, be retained on all properties. [Recommended in the City's Lakes Report.]

Relative to applications for permits to develop lots within Rehoboth that are over 5,000 square feet, Rehoboth shall conduct a review of Delaware Sediment and Stormwater regulations to determine if they provide adequate protections for the natural environment and public and private properties. SOLA3 has observed that the Conservation District has grandfathered prior approved sediment and stormwater plans for a new construction site within Rehoboth that is over 5,000 square feet that are less restrictive than the new regulations. Conservation District staff has verified that municipalities have the authority to provide their own, more effective sediment and stormwater regulations. So, if it is found that the state regulations are inadequate, the City shall adopt its own regulations to provide the necessary protections. Funding for this review could be done through increasing building permit fees.

The City shall authorize, fund (explore state and federal grants), and complete the necessary improvements to restore Lake Gerar.

The City shall undertake a vigorous campaign to educate business owners and citizens on the harmful effects of single-use plastics on the environment.

The City shall undertake a vigorous campaign to educate business owners on the harmful effects of not properly storing their solid waste and of improperly cleaning their equipment so that the resulting effluent flows into storm sewers, contributing to the high bacteria count in the Rehoboth Ave storm sewer, which eventually finds its way into the lakes and ocean.

REHOBOTH SHALL ASSESS IMPACT OF CLIMATE CHANGE AND PROVIDE SOLUTIONS*

Sea levels have risen more than 12 inches over the last century. DNREC states that "Over the coming years, we can anticipate even worse effects, more days of dangerously high heat, heavier precipitation, and sea level rise that leads to significant flooding" as the result of climate change. Coastal inundation from the Atlantic Ocean could be as much as 7 feet, and areas around Lake Gerar and Silver lake as much as 3 feet. Silver Lake would be altered by salt water from the ocean. To address climate change, the City shall:

Follow DNREC recommendations to avoid building new structures in flood-prone areas and use special design standards for structures where avoidance is not practicable.

Secure federal and state grants, supplemented with an approved capital improvement budget in FY 2021-22 budget, to provide professional assistance to design and install a citywide green infrastructure. DNREC and the EPA recommendations describe "natural systems or green infrastructure" to protect

property, the natural environment, the health of water bodies, and the public from flooding as:

Green streets, alleys, and parking lots: integrating various green infrastructure elements—such as Permeable Pavement, Bioswales, Planter Boxes, and Trees—so as to store, infiltrate, and evapotranspire stormwater.

Downspout Disconnection: rerouting rooftop drainage into rain barrels, cisterns, or permeable areas. Used to store stormwater or allow stormwater to infiltrate the soil.

Rainwater Harvesting: collecting and storing rainfall for later use, effectively slowing and reducing runoff.

Strengthen the regulations regarding the planting and replacement of trees removed during development.

Partnering with SOLA3, provide a citizen education campaign for residents, visitors and businesses on how their activities impact the water quality and aesthetics of our lakes and the environment [from 2015 CDP and GHD report May 2016].

Assess a stormwater or environmental impact fee for property owners to fund stormwater and infrastructure improvements, as other municipalities have done, such as Lewes and Newark.

Provide an incentive to property owners, such as a tax credit, to install such green remedies as downspout disconnection, rain barrels, rainwater harvesting, rain gardens, permeable surfaces, and riparian buffers. These improvements are also eligible for SOLA3's Lakes Improvement Matching Grant.

*SOLA3 will continue to work on these issues into the future.

In conclusion, SOLA3 understands that much has changed because of the effects COVID-19 has had on individuals, communities, and the nation at large. Undoubtedly the effect on the City of Rehoboth and its citizens will last several years, impacting its economy and the speed in which the 2020 CDP recommendations can be accomplished.

We offer our assistance in any way that will help to advance Rehoboth's 2020 CDP, understanding that implementing and funding all of its provisions may take more time than usual. On the other hand, for the sake of the City's continued success and sustainability, the City should not delay developing and implementing a comprehensive stormwater plan and a city-wide green infrastructure plan to protect public and private property, the natural environment, the health of water bodies, and the public health.

