UPPER GREENWOOD LAKE PROPERTY OWNERS ASSOCIATION
BOARD OF TRUSTEES Regular Meeting Minutes
July 11, 2023

Attendance

Becker, Heather	P	Grayson, Doug	P	Sarnowski, Karen	E
Culhane, Margie	P	Jones, Jim	E	Tonnessen, Linda	P
Cytowicz, Will	P	Manzo, Rene	E	Zielinski, Gary	E
Engleman, Lauren	E	Morrison, Debra	P		
Ezratty, Steven	P	Nicosia, Jessica	P	Open seat	
Giannantonio, Anthony	P	Nietzer, Laura	E	Open seat	
Gianniotis, Terry	P	Quirk, Andrew	P	Open seat	

P = Present E = Excused A = Absent R* = Remote – non-voting/quorum

Attorney Present – none

With a quorum present, the meeting was called to order at 6:31pm by President Terry Gianniotis.

A motion was made at 6:32pm to approve the June Regular Meeting and Executive Session Minutes as corrected by Margie Culhane, seconded by Andrew Quirk.

In Favor 7 Abstentions 3 Opposed 0

A motion was made at 6:35pm to approve the June Financials by Will Cytowicz, seconded by Steve Ezratty.

In Favor 10 Abstentions 0 Opposed 0

A motion was made at 6:38pm to update the signatories at Columbia Bank, Lakeland Bank, and RBC by Debra Morrison, seconded by Jessica Nicosia.

In Favor 10 Abstentions 1 Opposed 0

Correspondence:

1. Email received regarding issues at Audubon Cove. Someone who anchored in the cove dumped all their trash into the lake upon leaving for the day, many instances of boats/jetskis coming too close to docks, and going too fast.

A motion was made at 6:52pm to move to Executive Session by Will Cytowicz, seconded by Andrew Quirk.

In Favor 11 Abstentions 0 Opposed 0

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A motion was made at 7:15pm to exit Executive Session by Will Cytowicz, seconded by Anthony Giannantonio.

In Favor 11 Abstentions 0 Opposed 0

Treasurer's Report:

Discussion of proposed POA budget for 2024. Recommend an increase to $310 from $293 last year, which is a 2.4% change.

A motion was made at 8:00pm to approve the 2024 proposed budget with dues of $310 by Jessica Nicosia, seconded by Debra Morrison.

In Favor 11 Abstentions 0 Opposed 0

Membership Secretary Report:

Current Membership as of end of June 2023 (compared to 2022 numbers in parentheses)
POA – 745 (734)
Double Docks – 10 (10)
Tenants – 11 (5)
Specials – 7 (9)
Total POA, TEN, SPC – 773 (758)
Total Easement – 1473 (1517)

Overall numbers have POA running higher than a year ago, but Easement at this point last year was higher overall and the difference is not in the POA overage. We are essentially lagging in 29 easement members.
Letters for Dock Payments did go out last month which probably helped push our POA numbers up, but the office is reporting that we are still getting new members signing up. There are five dock holders in accessible areas unpaid and those docks will be reassigned. There is another couple who never built their dock and are now complaining that it won't work for them after two years and not a peep. The issue with these folks is their boat is too big for UGL, but that will be handled through docks. People were none too happy to hear their docks would be reassigned, but it is reasonable at this point, a full three months after payments are due and expected, and the latest pay by date is over a month and a half past. Non-accessible dock holders

(lakefront properties) will be sent letters in the next couple of days for their last notice to remove or pay. Moving forward we will be expecting payments by 5/1 and thereafter reassigning, unless we were contacted by dock holder and arrangements made for partial payments in advance of due dates.
Office Renovations have essentially been completed with some small tasks left to be done. We may need to work on changing the lock if we cannot figure out how to unlock the "fussy" lock.

Tops first payment has been made and we should soon be starting the on-boarding of our documentation and orientation of the staff to the program's software.

Committee Reports:

A) Activities: Heather Becker
Presentation and discussion of proposal for "sponsored" activities

B) Beach: Linda Tonnessen no report
C) Boathouse: Doug Grayson no report
D) Clubhouse: Anthony Giannantonio and Gary Zielinski no report

E) Dam: Andrew Quirk
After heavy rain in June water was again flowing over the spillway.

F) Bylaws, Rules & Regs: no chair, no report

G) Docks: Karen Sarnowski FOR EXECUTIVE SESSION

H) Dredging: Will Cytowicz, no report
I) Easement: Terry Gianniotis, no report
J) Entertainment: no chair, no report

K) Environmental: Andrew Quirk
The Citizen Scientist program is proceeding well, and we hosted Academic staff from Montclair State University. Practice sampling and analysis has been ongoing, and the Federally funded study began on July 1st. We will be taking samples every two weeks. Work should commence on detailing the degree of erosion at each Block and Lot around the Lake. The forms are almost complete and approximately 341 lakefront

homes have been identified. The Board should discuss ways of funding erosion control and runoff.

Andrew discussed the draft of a Watershed Implementation Plan recommended by Princton Hydro and based on recent observations. Please see Attachment A at the end of these minutes.

L) Insurance: Debra Morrison
Separate insurance quote was obtained for the inflatable Water Park which is $500 for the 2023 Summer Season plus $97 added to the umbrella . The information I was given last September vis-à-vis the two existing floats being covered under our general policy was incorrect and they weren't, so we ended up having to pay an additional $200 for these floats for this season in our latest insurance renewal. Requisite requirements are at least two lifeguards and one on a float to monitor the back end of it. Linda will meet with parents to ensure funding before Debra gets the binder.

M) Legal: FOR EXECUTIVE SESSION

N) Master Plan: no chair, no report

O) Parklands: Jim Jones

Bulkheads: Andrew Quirk
Approved completed bulkhead at 93 Point Breeze and liaised with Dock and Parklands Committees. On site meeting with PO and Jim Jones June 17th. It has two sections of different heights. The shorter but taller section is 40 inches above crest and was designed to support and protect an existing tree. The PO does not currently have plans to work on the area that has creosoted railroad ties that are failing and are in jeopardy of falling into the Lake.

Spoke with Hudson- Essex- Passaic Soil Conservation District about a silt fence that was never removed at 24 Spruce Point and is on the lake bottom. They will write to the PO to remove it.

Approved Barbaris plan to donate stone and repair area at southeastern tip of Point Breeze Drive.

Encroachments: Will Cytowicz and Margie Culhane

1. Prepared 2nd and final letter to PO on Riverside re abandoned vehicles.
2. Cease and Desist letters drafted to PO and tenant re tree cutting and open fires on the small island.

P) Publicity & Public Relations: Lauren Engleman, no report

Q) Security: Laura Nietzer

Due to the weather, it has been mostly quiet on the lake until the 4th of July. Just busy at the boat launch, and Security had to help a kayaker who was wearing a PFD but was unable to get back in his kayak.

A no-wake buoy will be put out by Snake Island in response to an email from a property owner worried about how shallow and rocky it is. Ken Hall was able to get additional no-wake buoys for no cost from the State this year.

The Island across from Witte Road which had issues with cutting trees and fires on parklands, including during the Red Flag warnings, has been quiet. In order to get the fire pit cans off the island, Ken said he would need the barge.

Security checked Blueberry Island this weekend and found that there are about 8 bags of garbage there that need to be removed. (Does anyone on Parklands check the island for refuse?)

West Milford police have been scheduled to come up to the lake a few times this summer. Only Ken Hall knows when they will be here. The security chair will be informed once they are on the lake.

R) Stumps: Jim Jones, no report

S) Weeds: Rene Manzo

Lake water quality is good. Additional weeds treated near Blueberry Island. If the weeds are brown they are dead or dying. They will drop over time from wave action and boats.

Third contractor not having luck with O&R. They are not responding and probably don't want to do the job.

Andrew has been dealing with aerator placement on homeowner's dock. He had Phil fix the dock so a plate could be mounted. Hope to have this installed this week.

T) West Milford Lakes Association: Andrew Quirk, representative
No meeting in June

NJCOLA: No report

A motion to adjourn was made at 8:51pm by Anthony Giannantonio, seconded by Will Cytowicz. Approved by acclamation.

Respectfully submitted,
Margie Culhane, Secretary

Attachment A

WATERSHED IMPLEMENTATION PLAN : DRAFT

Based on observations, Princeton Hydro recommends the following:

WATERSHED-BASED RECOMMENDATIONS

Upper Greenwood Lake's watershed affords multiple potential projects. Princeton Hydro recommends the stabilization of the eroding banks on both sides of Spruce Point Trail. An MTD may also be installed in line with the stormwater system receiving runoff from Spruce Point Trail and Warwick Turnpike. Another potential project involves the installation of a porous or vegetative paving system at the Greenwood Baptist Church's parking lot in order to reduce stormwater runoff. A rain garden may also be installed between this parking lot and the lake.

In the open green space adjacent to the inlet south of Dover Road, a bioretention system may be installed in order to retain stormwater, increase groundwater infiltration, and sequester nutrients. Invasive species present in the riparian buffer in this area can be removed and native vegetation can also be planted to reduce erosion.

A bioretention system is also recommended at the northern end of the lake where open green space exists between the lake and North Lake Shore Drive. A riparian buffer could also be planted in this area at the shoreline to reduce erosion and sediment inputs into the lake.

Princeton Hydro also recommends the installation of porous pavement or vegetated pavers in a parking area near the intersection of North Lakeshore Drive and Papscoe Road. The compacted lawn in this area may also be replaced with native meadow vegetation in order to increase soil infiltration and remove sediment and some pollutants from stormwater. A porous or vegetated paving system can also be installed at the Living Word Alliance Church's parking lot. Small raingardens could also be installed to capture runoff from the leaders that drain the church's roof.

More details regarding these potential projects are provided in the following report section.

IN-LAKE RECOMMENDATIONS

Biochar – Upper Greenwood Lake may benefit from the addition of biochar. These would be installed in the form of buoys with biochar bags suspended underneath. Biochar bags could be placed in multiple areas of the lake to absorb some of the nutrients introduced to the water column through internal loading or from the watershed.

Areas of known concentrated stormwater input are also preferred, so incoming nutrients can be intercepted.

These bags would likely be installed in Spring at the start of the growing season and replaced approximately halfway through the growing season.

EutroSORB F® Bags – A notable amount of nutrients are modeled to enter Upper Greenwood Lake from its tributaries. This may be mitigated with the use of the SePro product EutroSORB F®, a compound designed to remove SRP from flowing water. These products can be installed in streams to remove phosphorus prior to entry into a lake. It should be noted however that EutroSORB F® bags need to be periodically changed to achieve continued proper removal rates. Additionally, installation of bags into the stream may require permits through the NJDEP.

Floating Wetland Islands – Upper Greenwood Lake may also benefit from the installation of floating wetland islands. These structures serve to absorb some nutrients from the water column before they can be used by algae and would be best placed in the shallower southern end of the waterbody, as well as by the inflow from the small pond to the north. They also can provide habitat for fish and other aquatic animals.

Nutrient Inactivation and/or Sequestration - The application of products such as Alum or Phoslock® can be used to remove phosphorus from the water column, making it unavailable to algae. Upper Greenwood Lake may benefit from applying alum during instances of increased algae growth during the summer. Due to the tendency of alum to lower the pH of water, prior to application, an alum bench test must first be performed. The purpose of this test is to assess the approximate amount of alum that can be applied to the waterbody before the pond's pH drops to a level dangerous to fish and other aquatic life.

8.3 UPPER GREENWOOD LAKE Upper Greenwood Lake is located north of and downstream of Mt. Laurel Lake. Thus, the entire Mt. Laurel Lake watershed, which also includes the Lake Lookover watershed, is located within the Upper Greenwood Lake watershed. The lake receives the majority of its inflow from Mt. Laurel Lake. The two lakes are separated by a few small roads and/or bridges and it is likely that there is some mixing between the two lakes through the existing large culverts when the water level is at normal height. Given the above, all of the watershed restoration measures for both of the above-named lakes would function to reduce the pollutant load to Upper Greenwood Lake. Although there is dense residential development around the shoreline of Upper Greenwood Lake, especially on the western shoreline, the watershed is mostly forested, accounting for approximately 57% of total watershed area while wetlands account for approximately 26%.

SITE 7: SPRUCE POINT TRAIL, corrected to Island Trail.

A large culvert located under Spruce Point Trail, just off of Warwick Turnpike separates the southeast part of Upper Greenwood Lake from the eastern part of Lower Mt. Laurel Lake. The water feature at this location is narrow and resembles a canal. The water on both sides of the culvert was stagnant during the site visit in April 2022, with minor algal growth and a film across the surface. There are multiple catch basins on Spruce Point Trail and Warwick Turnpike that discharge directly into this side channel. Surface runoff from Spruce Point Trail also appears to drain directly into the side channel at multiple locations, resulting in extensive erosion of both the asphalt road edge above the culvert, as well as the banks of the channel directly adjacent to Spruce Point Trail. Erosion of the asphalt road edge was extensive on the eastern side and the pavement was becoming compromised. The bank of the channel adjacent to a

section of concrete bulkhead on the southwest side of Spruce Point Trail was steep and poorly vegetated, resulting in additional erosion. Photos 12-13. Erosion along both sides of Spruce Point Trail

Recommendation Site 7:

The primary recommendation (Site 7A) for this site is the stabilization of the eroding banks of the channel on both sides of Spruce Point Trail, with an emphasis on the southwest and northeast portions. This would include the stabilization of the compromised portion of the asphalt road and the installation of curbs or a similar, simple stormwater conveyance system that would direct the surface flow to defined sections of the stabilized banks rather than over the middle of the channel where it's currently eroding. A secondary recommendation (Site 7B) involves the installation of a manufactured treatment device with filter media in line with the existing subsurface stormwater system currently receiving drainage from Spruce Point Trail and Warwick Turnpike. Additional investigation into the volume of water that passes through the stormwater system in this location would need to be conducted, but based on the size of the outlet pipe, it appears to be substantial. As noted above, the water in the channel is shallow and appears stagnant. Algae, including both surface filamentous algae and potentially harmful cyanobacteria, thrive in nutrient rich stagnant water. A manufactured treatment device with filter media would reduce the accumulation of sediment in the channel thereby preventing further filling in and reduction in water depths. Additionally, an MTD reduces the amount of nutrients discharging into the lake by settling and sequestering the material inside the device, thereby reducing the available nutrients that feed algal growth.

Cost Site 7A: The approximate cost for design, permitting, and implementation of bank stabilization and installing a vegetated conveyance is between $7,500 and $15,000. Asphalt repair and/or installation of concrete curbing in lieu of vegetated conveyance is not included in the above estimate.

Cost Site 7B: The approximate cost for design, permitting, and implementation of an MTD is anticipated to be between $750,000 and $1,500,000 depending on size and depth.

SITE 8: GREENWOOD BAPTIST CHURCH

Greenwood Baptist Church is located on the eastern side of Warwick Turnpike, on the southwestern shoreline of Upper Greenwood Lake. There is a gravel parking lot measuring approximately 7,500 square feet adjacent to the church building. Portions of the parking lot appeared to be remnant asphalt indicating it may have been fully paved at one time. The gravel parking lot extends to the steep shoreline of the lake which has little vegetation other than a single row of trees. The parking lot was in poor condition at the time of the site visit with multiple large potholes that have formed as a result of traffic patterns and erosion from stormwater flows. Improving the management of stormwater and drainage throughout the parking lot would not only improve aesthetics, but also minimize loose gravel and sediment transportation to the lake during precipitation. Photos 14-15. Gravel parking lot at the Greenwood Baptist Church

Recommendation Site 8:

The first recommendation (Site 8A) for this site is the installation of a porous or vegetative paving system throughout the parking area. Introducing an option such as stabilized, permeable grass pavers would

reduce pothole formation and standing water as well as infiltrating and slowing stormwater velocity as it flows to the lake either on or below grade. The presence of vegetation and stone subbase enables infiltration and allows for sediment settling and pollutant removal, which is especially important in parking areas where oils and other fluids drip onto the ground from vehicles. This option would preserve the number of and help delineate parking spaces within the existing lot. This approach can be combined with options given below or approached as a stand-alone project. An additional option (Site 8B) to address drainage in the parking lot is the installation of a rain garden at the rear of the parking lot between the lot and the lake. Rain gardens and similar BMPs increase site resilience to the effects of climate change and provide enhanced visual aesthetics for properties. Given the space requirements, available parking space may be minimally reduced. Given the lot's location directly adjacent to the lake, new planting within the rain garden would also serve to enhance the existing, sparse riparian area and stabilize the bank soils. Cost Site 8A: The approximate cost for design, permitting, and implementation of converting the entire parking lot to porous pavement is between $400,000 and $700,000. Cost Site 8B: The approximate cost for design, permitting, and implementation of a rain garden or small bioretention area is between $40,000 and $70,000 depending on depth and the need for imported media.

SITE 9: NORTH LAKE SHORE DRIVE AND DOVER ROAD INLET

There is an area of open green space and a gravel pull-off located adjacent to a drainage stream that receives stormwater from a substantial portion of the surrounding neighborhood. Part of this area is designated as a fire lane and water draft site which may limit what, if any, modifications can be done in this location. There are overhead power lines along the side of North Lake Shore Drive which may present additional site constraints. The recommendations provided below assume there remains enough room between the stream and fire lane to incorporate green infrastructure. A large puddle was present between the grass and road during the site indicating poor drainage. Additionally, loose gravel was present in this area which likely enters the lake during rainfall events. The stream was lacking sufficient vegetative buffer and the bank was eroding in one location. Greenwood Lake is located approximately 80 – 90 feet from North Lake Shore Drive, south of the stream, and the stream itself has a total length of approximately 80 – 100 linear feet. Multiple BMP options are presented for this site since there will likely be considerable site constraints to consider. Depending on site constraints, these measures can be implemented independently or in conjunction with one another. Photos 16-17. Open grass area between the stream and fire lane

Recommendation Site 9:

The first recommendation (Site 9A) for this site is the implementation of a bioretention system in the open grass area between the drainage stream and the fire lane; this could also include a portion of the gravel area between the road and the grass. The creation of a bioretention system and minor regrading would create a sheet flow connection from the road, allowing for stormwater retention, infiltration and the sequestration of nutrients through native vegetation and soil media. A portion of the runoff from North Lake Shore Drive drains to a catch basin located directly across the street from the lake and then travels under the grass area via a small pipe that discharges into the drainage stream. Depending on site constraints and elevations, the subsurface pipe could be modified to discharge directly into the bioretention system. Further investigations would need to be conducted to determine the depth to

groundwater given the proximity to the lake. A second recommendation (Site 9B) that could be done independently or in addition to the bioretention system involves the enhancement of the stream riparian buffer through management of invasive plant species and planting new, native vegetation. The root structures of native plants will increase streambank integrity and reduce erosion caused by stormwater that discharges into the stream from the pipe off of North Lakeshore Drive. Rip rap could be added at the pipe outlet as an additional method of attenuating erosive flows. Cost Site 9A: The approximate cost for design, permitting, and implementation of a bioretention area is between $50,000 and $125,000 depending on depth and size. Cost Site 9B: The approximate cost for design, permitting, and implementation of an aquatic riparian buffer planting and invasive species treatment is between $12,500 and $25,000 depending on size and extent of treatment required

SITE 10: NORTH LAKE SHORE DRIVE COVE

There are a series of catch basins on North Lake Shore Drive around the small cove at the northern end of the lake that receive stormwater runoff from the community north and west of the cove. The cove is lined with small docks for boat mooring but there is a large area of open green space between the cove and the road. The stormwater pipes from the catch basins travel under this grassy area before discharging directly into the lake. There are at least three main pipes that discharge into the cove at this location with two of the pipes in relatively close proximity to each other along the western half of the cove. Portions of the open space, including the shoreline,were in poor condition, with little grass and signs of compaction and erosion. Much of the shoreline was lacking a vegetative buffer aside from a few small trees. Photos 18-19. Open space between North Lake Shore Drive and the northern cove

Recommendation Site 10:

The first recommendation (Site 10A) for this site is the implementation of a bioretention system in the open grass area between North Lake Shore Drive and the lake. The system could consist of one large bioretention system that receives drainage from multiple catch basins, or the creation of multiple, smaller bioretention systems that each receive drainage from one catch basin. In addition to stormwater from the catch basins, a bioretention system could receive sheet flow from directly from the road that bypasses the catch basins, which likely occurs during heavy rain. Further investigation would need to be conducted to determine the contributing drainage areas and depth to groundwater given the close proximity to the lake to ensure proper design and sizing. A second recommendation (Site 10B) that could be considered independently or in addition to the bioretention system is the creation of a vegetated shoreline buffer through new native plantings. The root structures of these plants would strengthen the slopes and soils of the existing shoreline, reduce erosion and further limit sediment inputs into the lake. Cost Site 10A: The approximate cost for design, permitting, and implementation of a bioretention area is between $90,000 and $175,000 depending on depth and size. Cost Site 10B: The approximate cost for design, permitting, and implementation of an aquatic shoreline buffer planting and invasive species treatment is between $40,000 and $60,000.

SITE 11: PARKING LOT ON NORTH LAKESHORE DRIVE NEAR PAPSCOE ROAD

There is a small asphalt parking lot on the west side of North Lake Shore Drive, near the intersection with Papscoe Road, along the northeast shoreline of the lake. The lot is approximately 5,500 square feet and

extends to North Lake Shore Drive, with no curbs or other separation between the lot and road. Based on the existing grades, the parking lot likely receives some stormwater runoff from the road. There is one catch basin in the southern corner of the parking lot which collects the majority of the runoff from the lot. There is a circular, concrete structure in the center of the parking lot with two manholes; however, it's function was not evident at time of observation, but should be confirmed prior to further design recommendations. A grass area between the parking lot and the lake that is approximately 3,300 square feet in area leads to the shoreline of the lake which is lined with large rocks and a large patch of the invasive Phragmites australis was observed growing along the entire length of shoreline. Photos 20-21. Parking lot and grass area on North Lake Shore Drive

Recommendation Site 11:

The first recommendation (Site 11A) for this site is the installation of a porous or vegetated paving system throughout the parking area. Introducing an option such as permeable grass pavers would aid in slowing stormwater runoff and giving it time to infiltrate before it reaches the lake via sheet flow or the catch basin outlet pipe. The gravel media and vegetation allow for infiltration of water into the ground where sediment settling and pollutant removal would occur. A second recommendation (Site 11B) involves removing some or all of the compacted lawn and replacing it with native meadow vegetation that has deeper root systems to increase natural soil drainage and filter additional stormwater of sediments and select pollutants. This type of planting strategy will also help reduce the presence of geese on the site and thereby reduce the additional nitrogen source created by their droppings.

Cost Site 11A:

The approximate cost for design, permitting, and implementation of converting the entire parking lot to porous pavement is between $250,000 and $450,000 depending on type and depth of storage zone.

Cost Site 11B: The approximate cost for design, permitting, and implementation of an aquatic shoreline buffer planting and invasive species treatment is between $30,000 and $55,000.

SITE 12: LIVING WORD ALLIANCE CHURCH

Living Word Alliance Church is located on the southeastern shoreline of Upper Greenwood Lake on North Lake Shore Drive. The church is located directly along the water and a larger asphalt parking lot (14,000 square feet) associated with the church is located directly across North Lake Shore Drive. There is a catch basin in the center of the large parking lot that appears to receive stormwater from the entire parking lot, though at the time of visiting, there was a large puddle around the structure following a rain event the previous night. The parking lot also appears to receive additional stormwater runoff from a portion of North Lake Shore Drive due south of the parking lot. Across the street, there is a strip of grass and a small shrub bed located between the front of the church and the uncurbed road. Leaders from the church roof discharge directly onto the grass area where signs of erosion and sodden grass were present.

Photos 22-23. Living Word Alliance Church parking lot and front lawn.

Recommendation Site 12: The first recommendation (Site 12A) for this site is the conversion of the asphalt surface to a porous or vegetated paving system in the large parking lot. Reducing the volume of runoff from this lot will also reduce the transportation of debris, sediments and nutrients that get carried

into the system during rainfall events which are likely contributing to the clogging of the existing catch basin. The second recommendation (Site 12B) for this site is the creation of at least two small-scale rain gardens or downspout planters in front of the church that receive runoff from the two leaders that drain the roof. The native vegetation and enhanced soil media in these systems would infiltrate stormwater into the void spaces and trap sediments and/or nutrients before they can enter runoff and eventually the lake.

Cost Site 12A: The approximate cost for design, permitting, and implementation of converting half of the parking lot to porous pavement is between $500,000 and $800,000 depending on type and depth of storage zone.

Cost Site 12B: The approximate cost for design, permitting, and implementation of downspout planters is between $5,000 and $15,000.