

**JOINT LAKE BLUFF PARK DISTRICT & VILLAGE OF LAKE BLUFF  
AD HOC BEACH EROSION COMMITTEE  
SPECIAL JOINT MEETING  
NOVEMBER 12, 2019**

The Special Joint Meeting of the Ad Hoc Beach Erosion Committee was held at the Lake Bluff Park District Recreation Center, 355 W. Washington Avenue, Lake Bluff, Illinois.

The meeting was called to order at 6:30 p.m. by Chair Lemieux.

The following members were present when the roll was called: J. Beeler, D. Forlow, G. Gamrath, P. Lemieux, J. Markee, K. McKendry, G. Russell, K. Snoblin and B. Wallace.

Also present were D. Irvin, Lake Bluff Village Administrator; and R. Salski, Lake Bluff Park District Executive Director.

**Introductions**

All members introduced themselves and provided some background information.

**Statement of Visitors**

None

**Committee Sets the Order of the Meeting**

There were no changes to the agenda.

**Discussion Regarding Committee Mission, Guiding Principles and Policy Objectives**

Administrator Irvin said the mission of the Ad Hoc Beach Erosion Committee is to identify and prioritize actions to preserve and protect the beach. A prospective timeline and options for funding should be included in the final recommendations to the Lake Bluff Park District Board and the Village of Lake Bluff.

Member Russell asked Administrator Irvin how this whole idea originated and if the Village would be a part of the final recommendations to solve the erosion issues.

Administrator Irvin advised the Village and Park District discussed this issue, so the Village Board is aware of the erosion problems. He said it is a community issue and concern, and the Village is a property owner of the right-of-way going to the beach. Historically, there have been joint projects that the Village has participated in.

Executive Director Salski noted that Village and Park District staff, and Park District Committee members met a month ago to discuss how to tackle this issue and everyone felt that it would be best to tackle it together as one unit.

Member Russell asked if the Village would participate financially, and Administrator Irvin said that it is possible.

Administrator Irvin provided the following information:

Guiding Principles – The Village and Park District residents (and stakeholders) embrace these shared values which serve as guideposts describing our conduct and behavior in all circumstances. They apply to everyone without exception.

- Take personal responsibility for the quality of our community
- Act with integrity, accountability and in the best interest of all
- Demonstrate kindness, neighborliness, and concern for others
- Be inclusive, welcoming, and open minded
- Interact with respect and civility in all circumstances
- Embrace a positive, forward-looking orientation
- Cherish our history, culture and legacy of excellence

Policy Objectives – Ensure insightful governance, financial viability, and safety; preserve and enhance our natural heritage; and fortify our public assets and systems.

Chair Lemieux said the Park District Board authorized the study, and the goal of this Committee is within the framework of the study to determine how to best protect the shoreline, beach, and bluffs from damage by wave attacks. He noted it is anticipated that at least three to six committee meetings will be needed to reach the goal of presenting a report to the Park District and Village Board recommending whether or not any action should be taken. If action is recommended, it needs to be determined what that action will be and what steps should be taken about funding.

Chair Lemieux noted that public comments and questions will be taken after each section and there will be no time limit set right now. Any recommendations that come from this Committee will go to the Park District and Village Board, and any action they take will be a public action and will involve public input. Some of the regulatory bodies such as the Army Corps of Engineers and the Illinois Department of Natural Resources (IDNR) will also seek public comments.

### **Review of Sunrise Park and Beach History**

Executive Director Salski explained the history of how this project came to light. In 2009, the Park District did a communitywide survey and results came back that the beach was number one in the order of importance, at least in terms of the Park District. At that time, the Board worked on a strategic plan to really look closely at the beach. A Capital Task Force was formed, and members looked at all the Park District's assets, including the beach.

Executive Director Salski said a Master Plan was developed in 2013, which was more of a concept design. A coastal engineer was not brought in to study the beach, and Shabica & Associates joined in some of their meetings. At that time, the lake levels were low. The Master Plan addressed such things as some breakwaters, stairs, cleaning up the bluffs and removing invasive trees. There is now a stewardship program that takes care of the bluff.

According to Executive Director Salski, in 2015 there was a referendum which passed and covered some of the costs for stairs, bathrooms, and bluff work.

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Executive Director Salski said another communitywide survey was done a few years later jointly with the Village of Lake Bluff and the School District, and again Sunrise Park and Beach came up as the number one asset in the community. A short time later, the Parks and Beach Committee started looking at different companies to analyze the breakwaters (groins). One of the groins near the NSWRD was damaged during a storm in 2014. A Request for Proposals (RFP) was sent out and three proposals were received. The Parks and Beach Committee reviewed the proposals and recommended AECOM, which was approved by the Park Board at a cost of \$60,000 for the study.

### **Presentation Regarding Preliminary Engineering Recommendations by AECOM Consulting Engineer Bill Weaver**

Bill Weaver, from AECOM, gave a brief summary of his background and provided some information about the company.

Mr. Weaver gave a history of Sunrise Park and Beach problems over the years and explained what the current problems involved. He noted that future issues would include: lake levels, erosion, bluff failures and landslides, groins, parking lot repairs, and NSWRD.

Mr. Weaver explained the study recommends a base line option and an expanded baseline option. The baseline option protects the underlying soils by creating structures that will allow additional sand to form along the beaches. One of the big questions that arose is what if the recommended repairs cannot be done at once because of the cost factor, and how could the project be done in phases.

Mr. Weaver said there are so many issues involved, so he put together a matrix and explained how it worked. Each one of the structures can be evaluated against the ten criteria in the matrix. Each beach cell is then analyzed so that there will be a ranking of what cell has the most priority. For example, erosion is a lot more important than aesthetics. He went through the matrix process and determined that the central beach is probably the highest priority. Second would be north beach, third would be south beach, and fourth is the expanded base option which contains extra items that are wanted, but not absolutely needed.

Member Wallace commented that based on ranking, the south beach gets a five for severity and erosion, and he wondered if this meant that the base of the bluff is safer than the other ones. Mr. Weaver said yes, because there is extra stone in that area which protects the base.

A Member asked if it is known how long repairs would last, and she realized it is important to repair the problem before it creates structural changes. Mr. Weaver said there is no way to predict how long repairs would last because of high and low water levels.

Member Wallace asked if these repairs are engineered to take water levels above where they are at now, and Mr. Weaver said his company designs for 100-year wave events. He was not sure what the original plan was designed for at Sunrise Beach.

Chair Lemieux asked if some or all of the improvements take place, how long is the benefit period. Mr. Weaver said the structures are made to last 100 years.

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Chair Lemieux asked if these repairs are not done for five years from today, would AECOM's recommendation change five years from now. Mr. Weaver said they would have to assess what the conditions would be five years from now.

Member Gamrath asked if the waves have been a bit wilder in the last few years. Mr. Weaver said yes they have, because with higher lake levels it makes a big difference and every foot of water adds 7/10's of a foot to the wave length.

Member McKendry asked about the height of the structures at Sunrise Beach, compared to Rosewood Beach in Highland Park. Mr. Weaver said there is deeper water at Rosewood, so the structures are higher because of the bigger waves.

Member McKendry said if this is cyclical and the water level recede, would we still want to do these repairs to protect the bluff because of more severe storms in the future. Mr. Weaver said that statistically it would be strange if the water level went higher, but no one can predict what will happen. He said Sunrise Beach is a great facility and thought the community would want to keep it intact.

A Member asked if there is a possibility of extending the groins and Mr. Weaver said the State will not allow it, so the groins can only extend 125 feet out from shore.

Chair Lemieux asked if NSWRD does their project, will it alter any of the recommendations or the ranking of the beach project. Mr. Weaver said no, not at all, because the NSWRD project involves completely burying piping below ground.

Administrator Irvin explained that NSWRD will be making a presentation in the near future about their project. He said it was budgeted and they were prepared to move forward, but it just did not happen. It is a water quality and overflow issue, and completion of their project would give them the ability to empty their pipes so they could do maintenance on their system because the infrastructure is aging.

Executive Director Salski said in 2013, the Park District asked NSWRD to wait on their project until the District developed their Master Plan. He said NSWRD paid \$7,000 toward the AECOM study. It was also thought that some of the extra fill from their project could be used for the beach project. Mr. Weaver noted there would not be a huge savings by using the extra fill because a lot of it is clay and cannot be used for fill.

Member Russell clarified it was thought there could be a savings by using NSWRD's fill, but as further studies were done, it was determined it would cost more to use it.

Member Russell stated he did not envision the Village, or the Park District could go ahead with any of the beach options until NSWRD implements their project and it is determined how the project would impact the different areas of the beach. There can't be any rational decision made without knowing that information. He noted NSWRD actually participated in the financing for all the six steel groins and wondered if they will participate in the replacement of any of those groins.

Chair Lemieux said the plan is to invite NSWRD to the next meeting.

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Executive Director Salski said before NSWRD funds their project, they want to make sure the Village and Park District are in agreement that the project can move forward.

Mr. Weaver explained that wetland mitigation has an affect at the south beach. If stone is placed in the lake, there has to be mitigation for what is filled, and this would be three acres for every acre that is filled. Cost for the whole project would be \$3.9 million, and he explained the cost breakdown for each beach area.

Member Wallace questioned the contingency amount. Mr. Weaver said that this is a preliminary design, and cost is difficult and tends to vary because of stone costs and barge costs.

Member Markee asked if the beach was done in phases with the central beach first, what would be the time frame for the project and how long would the beach be closed. Mr. Weaver said it would be one season, depending on the weather. He noted permit fees would cost around \$20,000.

### **Committee Member Report**

Member Russell noted the pictures of the beach from the 1970's, in the presentation, are printed backwards and should be re-printed (north to south and south to north).

### **Staff Report**

None

### **Next Meeting**

Chair Lemieux said NSWRD will be contacted to determine what dates they are available to make a presentation to the Village and Park District. There will also be discussion at the next meeting about how prior projects were funded, and how other communities are funding these types of projects.

### **Adjournment**

There being no further business, Member Forlow moved, seconded by Member McKendry, to adjourn the meeting. Motion passed by unanimous voice vote and meeting adjourned at 8:10 p.m.

Approved this 10th day of December 2019  
Lake Bluff Park District