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State of New Jersey

THE PINELANDS COMMISSION

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NEW LISBON, NJ 08064

(609) 894-7300

www.nj.gov/pinelands



Chris Christie  
Governor

Kim Guadagno  
Lt. Governor

General Information: [Info@njpines.state.nj.us](mailto:Info@njpines.state.nj.us)  
Application Specific Information: [AppInfo@njpines.state.nj.us](mailto:AppInfo@njpines.state.nj.us)

Sean W. Earlen  
Chairman

Nancy Wittenberg  
Executive Director

July 16, 2018

Mr. Robert Lupp  
State Library – NJ Reference Section  
185 West State Street  
P.O. Box 520  
Trenton, New Jersey 08625

Dear Mr. Lupp:

Enclosed is the Pinelands Commission meeting minutes and attachments for June 8, 2018 for your information.

Sincerely,

*Teri Melodick*

Teri Melodick  
Principal Clerical Assistant

PC1  
Enclosure: Minutes



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P 250

PC2-35

PINELANDS COMMISSION MEETING  
Richard J. Sullivan Center  
Terrence D. Moore Conference Room  
15 Springfield Road  
New Lisbon, New Jersey

MINUTES

**June 8, 2018**

Commissioners present

Bob Barr, Jordan P. Howell, Jane Jannarone, Ed Lloyd, Mark Lohbauer, William Pikolycky, Richard Prickett, and Chairman Sean Earlen. Also present were Executive Director Nancy Wittenberg, Governor's Authorities Unit representative Craig Ambrose and Deputy Attorney General (DAG) Bruce Velzy.

Commissioners Absent

Candace Ashmun, Alan W. Avery Jr., Giuseppe Chila, Paul E. Galletta, D'Arcy Rohan Green and Gary Quinn.

Chairman Earlen called the meeting to order at 9:33 a.m.

DAG Velzy read the Open Public Meetings Act Statement.

Executive Director Nancy Wittenberg called the roll and announced the presence of a quorum. (There were 8 Commissioners present at the meeting.)

The Commission and public in attendance pledged allegiance to the Flag.

Minutes

Chairman Earlen presented the minutes from the open and closed sessions of the May 11, 2018 Commission meeting. Commissioner Lohbauer moved the adoption of the minutes. Commissioner Lloyd seconded the motion.

The May 11, 2018 open and closed session Commission meeting minutes were adopted by a vote of 8 to 0.

Committee Chairs' Reports

Chairman Earlen provided an update on the May 18, 2018 Policy and Implementation Committee meeting:

The Committee adopted the minutes of the April 27, 2018 meeting. The Committee recommended certification of Mullica Township Ordinance 6-2018, revising permitted uses, water quality standards and zoning boundaries applicable to the Pinelands Village of Weekstown to recognize a pre-existing non-conforming use, a boat building facility.

The Committee received an update on the re-examination of the Long-Term Economic Monitoring Program and efforts by staff to improve the report and consider what special studies should be undertaken. A report submitted by a consultant from Rutgers University is under review at this time. The Office of Information Technology has been consulted regarding the creation of an interactive website where users can download the data for their own use.

The Executive Director informed the Committee that the Federal Aviation Administration (FAA) and the South Jersey Transportation Authority (SJTA) are interested in changing the terms of a 2004 Memorandum of Agreement (MOA) that required the creation of grassland habitat in exchange for further development at the Atlantic City Airport. The FAA wants the habitat moved away from the runways due to concerns with airline safety and potential bird strikes. Chairman Earlen added that no action was taken on the matter.

Executive Director's Reports

ED Wittenberg updated the Commission on the following:

- The Audit team is on-site and working on the FY 17 Audit.
- Construction for the Pinelands exhibits will begin on June 18<sup>th</sup> and is expected to be complete mid-September.
- Staff met with the Joint Base's new Environmental Chief.
- Staff is scheduled to meet at the Atlantic City Airport with SJTA, the FAA and New Jersey Department of Environmental Protection (NJDEP) Fish and Wildlife staff to look at the current grassland habitat. SJTA has concerns about the close proximity of the runway to bird habitat. FAA supports SJTA's concerns. The FAA issued a certification after the 2004 MOA went into effect that advised habitat should not be established near runways. SJTA has started looking for other potential habitat areas. ED Wittenberg said she hoped to have this matter on the July P&I Committee meeting agenda.

- Staff met with the New Jersey Farm Bureau and a consultant that is working on a transfer of development rights program for the state.

Director Larry Liggett updated the Commission on the following matters:

- There were funds included in the FY 18 Budget for a stormwater basin study in partnership with USGS. Staff will be proposing that those funds be rolled over into the FY 19 budget and increased so that two basins can be examined.
- Staff discussed the Pinelands Infrastructure Trust Fund with NJDEP representatives, who are interested in including Pinelands projects in their Intended Use Plan to be issued later this year. The Commission will ultimately need to adopt a revised Pinelands Infrastructure Master Plan containing revised priorities and criteria so that the approximately \$15 million in available funding can be appropriately allocated to new projects.
- Staff continues to work out the details of an archaeological field school at a Native American site in Shamong Township. The Archaeological Society of New Jersey is interested in partnering with the Commission on the dig now that the Commission's original partner, Monmouth University, is not able to participate.

Director Chuck Horner provided information on the following Regulatory matters:

- Mullica Township issued site plan approval for the Sweetwater Casino Restaurant. Township officials believe construction will begin in the fall.
- Commission staff attended a municipal court hearing that raised a State Right to Farm procedural issue. The State Right to Farm Act and its implementing regulations do not supersede the Pinelands Comprehensive Management Plan (CMP) regulations. The issue raised by the court hearing was how a Pinelands Area municipality, that administers the CMP regulations through their certified municipal land use ordinances, should proceed with potential Right to Farm issues. Written guidance in a letter from the State Agriculture Development Committee staff indicated that all potential municipal Right-to-Farm issues must first be filed with the County Agricultural Development Boards.
- Staff will be meeting with Southampton Township officials, at their request, to discuss whether a commercial use meets the Commission's regulations.

Communications Officer Paul Leakan updated the Commission on the following:

- Artifacts will soon be sent to Split Rock Studios in Minnesota to be used for the final production of the exhibits.
- Enrollment for the Summer Short Course on July 19<sup>th</sup> is up compared to last year.
- The Pinelands Orientation will be held on July 24<sup>th</sup> at the Commission. There will be a presentation on conformance.

Public Development Projects and Other Permit Matters

Chairman Earlen presented a resolution recommending approval for the installation of a 1.42 acre ground mounted solar energy facility in Evesham Township.

Commissioner Lohbauer moved the adoption of a resolution Approving With Conditions an Application for Public Development (Application Number 1981-0556.051) (See Resolution # PC4-18-16). Commissioner Barr seconded the motion.

Commissioner Lohbauer said there is currently no mechanism in the CMP to require an evaluation as to whether an applicant has the ability to site solar panels on impervious surfaces before allowing such facilities to be developed on open fields. He suggested the matter be discussed by the P&I Committee.

The Commission adopted the resolution by a vote of 8 to 0.

Planning Matters

Chairman Earlen presented a resolution recommending the certification of Mullica Township's Ordinance 6-2018.

Commissioner Lohbauer moved the adoption of a resolution Issuing an Order to Certify Ordinance 6-2018, Amending Chapter 144 (Land Development) of the Code of Mullica Township. (See Resolution # PC4-18-17). Commissioner Pikolycky seconded the motion.

The Commission adopted the resolution by a vote of 8 to 0.

Chairman Earlen said the resolution related to adoption of CMP amendments changing the interested party definition will be tabled to a later date. He added that some Commissioners were not present at the closed session discussion last month where DAG Velzy offered guidance on this matter.

Public Comment on Public Development Applications and Items where the record is open

Thomas Doherty of New Gretna said he is opposed to the tree removal surrounding Bass River Fire Tower (Application # 1996-1386.003) because of the loss of recreation, history, environment and business. He said replacing the fire tower with a taller structure would be a better solution than removing trees.

Richard Buzby, Chief of Police for Little Egg Harbor Township, supports Application # 1996-1386.003 to remove trees surrounding the Brendan Byrne State Forest Fire Tower for better forest fire detection. He said he appreciates the history of the trees planted by the Civilian Conservation Corps (CCC), but early detection of forest fires is crucial in battling the fires and in protecting the lives of the public and firefighters and other emergency response teams. He said a new tower would be ideal but its not in the budget. He shared a letter addressed to Acting NJDEP Commissioner Catherine McCabe (See attached.)

Karl Swanseen of Bass River Township is opposed to removing trees at Bass River State Forest (Application # 1996-1386.003). He said the real issue is the age and height of the Bass River Fire Tower. He said other solutions to fire detection need to be investigated. He said other areas in New Jersey are using camera systems to detect fires.

Bill Brash of the New Jersey Fire Safety Council said he supports the removal of non-native trees currently blocking the view at the Bass River State Fire Tower. He said technology is great but cannot be relied upon in fire detection. (See attached letter of support.)

Carol Bitzberger of Bass River Township said alternatives in fire detection should be researched. She added that she wrote to the Commission and never got a response. She said she would like to see the use of cameras to detect fires.

Riki Losiewicz provided a brochure from EnviroVision, an imaging system that detects smoke. She also provided a handout on the original Bass River State Forest Management Plan Objectives. She said there are alternatives to detecting fires other than using antiquated fire towers and cutting trees. Handouts are attached.

Frank Runzol, Acting Fire Chief of Little Egg Harbor, said he supports Application # 1996-1386.003 for the tree removal at Bass River State Forest. He said the fire tower is the best mechanism to spot fires. He said it would be nice to replace the tower because of its age but due to financial constraints the replacement is not a possibility. He said the bottom line is life and property safety.

April Dolch of Bass River Township raised concerns about potential injuries to the men and woman who have to go up in the aging tower to fire watch. She said there should be more consideration into the application.

Kathy Gardener who provides guided hikes around the Bass River Fire Tower said the forest is enchanted.

Karl Swanseen reiterated that technology is the way to detect the fires.

John Ryan of Bass River Township said that the forest is a gem and we should use what happened at Lake Absegami as a lesson. He said that when cutting trees, less is best.

Sandy Anderson of Sweetwater said we need to preserve the forest that we have.

Director Horner stated that staff will address the comments offered today in the Public Development report.

Commissioner Prickett asked Director Horner about the Commission's process for responding to public comment.

Director Horner said staff responds back to the commenter, in writing, advising them that their comments have been received. Staff also addresses the comments in the public development report.

Ordinances Not Requiring Commission Action

Chairman Earlen asked if any Commissioners had questions regarding the ordinances not requiring Commission action:

- Egg Harbor Township Ordinance 2018-14
- Shamong Township Ordinance 2018-6
- Stafford Township Ordinance 2018-05
- Waterford Township Ordinance 2018-10

No members of the Commission had questions.

Other Resolutions

Chairman Earlen presented a resolution recommending the proposal of amendments to the CMP related to alternate design septic systems.

Commissioner Lloyd moved the adoption of a resolution To Authorize the Executive Director to Propose Amendments to the Comprehensive Management Plan in Accordance with the Administrative Procedure Act (Alternate Design Wastewater Treatment Systems Pilot Program). (See Resolution # PC4-18-18) Commissioner Jannarone seconded the motion.

Chief Planner Susan R. Grogan said that at the April 27, 2018 P&I Committee meeting, Mr. Ed Wengrowski presented the Implementation Report for the Alternate Design Septic Systems Pilot Program. She said the Implementation Report recommended that the August 5, 2018 installation deadline for Pilot Program systems, of which there are four, be eliminated. She added that should a system need to be suspended from the program the CMP authorizes the Executive Director to cease installations of a specific technology. She said the amendments will also allow for new septic system technologies to participate in the Pilot Program.

The Commission adopted the resolution by a vote of 8 to 0.

General Public Comment

Diane Bynun of Medford, NJ, said she is concerned about the trees at Bass River State Forest. She said the trees were planted under President Franklin D. Roosevelt's administration and he loved trees.

Dr. Emile DeVito of the New Jersey Conservation Foundation raised an issue about a temporary deed restriction placed on a portion of land at a mining operation in Lacey Township. He said in the 1990's, a consultant's report determined that there were rare species on the property and that the surrounding land should be preserved. He said the land was never preserved, and a current threatened and endangered species report has not

found any species. He said because there were no findings, the mining operation was allowed to expand. He said the Commissioners don't know about these issues because mining is private development and reviewed only by staff. He also noted another mining application in Woodland Township. He said that the proposed deed restriction on the Woodmansie mine is better because it's not temporary like the deed restriction in Lacey Township. He said there should be public hearings on mining applications and better survey protocols.

Chairman Earlen asked staff to provide some details about the mining applications that Dr. DeVito commented on.

Director Horner said staff felt a temporary deed restriction was adequate based on the layout of property at the mining operation in Lacey Township.

Commissioner Prickett said he was unfamiliar with a temporary deed restriction and was curious if staff had used them in the past.

Director Horner said the Commission frequently enters into these types of agreements and not just for mining applications. He said the deed restrictions protect the areas that are potentially critical habitat.

Commissioner Lloyd said he agreed with Dr. DeVito's comments and it reminded him of Ocean Acres in the sense that once you develop a certain area, there are impacts on the T&E species located in the surrounding parcels. He said the Commission should be taking a closer look at temporary deed restrictions.

Director Horner offered that the Ocean Acres development was challenging but not quite the same as the Lacey Township mining application.

Commissioner Lohbauer asked how staff addresses conflicting Threatened & Endangered (T&E) species data.

Director Horner said there have been instances where a T&E survey has been submitted and staff knows that the results are not accurate, either based on a neighbor or interested party notifying the Commission of the presence of a certain T&E species. He said the Commission requires that surveys use the best scientific information available. He said the survey needs to be done during a season when the species is most active; for example, snakes surveys must be conducted during the spring and fall months. He said if an applicant submits a survey that was undertaken in the wrong season, they will have to re-survey during the correct season and re-submit.

Commissioner Lohbauer asked if a survey is received that produces negative T&E results but staff knows otherwise, can staff contest the results.

Director Horner said that staff encounters inconsistent T&E surveys quite often. He said when the Commission staff receives a municipal approval that is not consistent with the

CMP, the staff issues a letter to the applicant scheduling a public hearing. The applicant cannot move forward until the issue is resolved. He added that this is what Commission staff refers to as the "call up" process.

Director Horner added that the Woodmansie mining application was called up for inconsistencies with the T&E standards. He said the applicant is working on an alternative approach to resolve the issue and, at this time, all public hearings that have been scheduled have been adjourned until a later date.

Dr. Jonathan Peters said the USDA released new data on the long-term monitoring of recreation uses. He also said that the Bureau of Economic Analysis has found that not all recreation is created equal with regard to economic value. He said activities have both low and high economic values associated with recreational uses. He said the Long Term Economic Monitoring report should include additional analysis, as a growing amount of land in the Pinelands is preserved and or deed restricted.

Ryan Rebozo of the Pinelands Preservation Alliance said it is crucial that T&E surveys are conducted during the correct season, especially when plants are blooming and animals are not hibernating. He recommended the Commission take a closer look at its T&E survey protocols because even some small changes could make a big difference.

Dr. Emile DeVito of the New Jersey Conservation Foundation said there is a parcel on Route 72 owned by Woodland Township and surrounded by both state land and the Michael Huber Preserve. He said the parcel is home to many red-headed woodpeckers. He said Woodland Township has requested that the State declare the parcel in need of redevelopment. He said because of the bird habitat, the parcel should be acquired by the state.

Jason Howell of the Pinelands Preservation Alliance provided an update on the efforts of a 350-member volunteer group that has been cleaning up trash and debris throughout the Pinelands.

#### Other

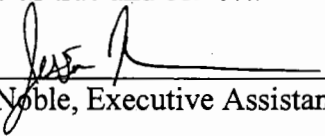
Commissioner Prickett requested an update on the forestry application at Lake Absegami sometime in the near future.

Commissioner Lohbauer said that based on the information provided by the Attorney General's office on the "interested party" matter at the May Commission meeting and before the matter is placed on the agenda for a vote, he would like to afford the public another opportunity to comment on the issue.

#### Adjournment

Commissioner Jannarone moved to adjourn the meeting. Commissioner Lohbauer seconded the motion. The Commission agreed to adjourn at 11:27 a.m.

Certified as true and correct:

  
\_\_\_\_\_  
Jessica Noble, Executive Assistant

Date: \_\_\_\_\_, 2018



**RESOLUTION OF THE NEW JERSEY PINELANDS COMMISSION**

NO. PC4-18- 16

**TITLE:** Approving With Conditions an Application for Public Development (Application Number 1981-0556.051)

Commissioner Lohbauer moves and Commissioner Barr seconds the motion that:

WHEREAS, the Pinelands Commission has reviewed the Public Development Application Report and the recommendation of the Executive Director that the following application for Public Development be approved with conditions:

1981-0556.051

<b>Applicant:</b>	Evesham Township School District
<b>Municipality:</b>	Evesham Township
<b>Management Area:</b>	Pinelands Rural Development Area
<b>Date of Report:</b>	May 18, 2018
<b>Proposed Development:</b>	Installation of a 1.42 acre ground mounted solar energy facility accessory to an existing school.

WHEREAS, no request for a hearing before the Office of Administrative Law concerning the Executive Director's recommendation has been received for this application; and

WHEREAS, the Pinelands Commission hereby adopts the Conclusion of the Executive Director for the proposed development; and

WHEREAS, the Pinelands Commission hereby determines that the proposed public development conforms to the standards for approving an application for public development set forth in N.J.A.C. 7:50-4.57 if the conditions recommended by the Executive Director are imposed; and

WHEREAS, pursuant to N.J.S.A. 13A-5h, no action authorized by the Commission shall have force or effect until ten (10) days, Saturdays, Sundays and public holidays excepted, after a copy of the minutes of the meeting of the Commission has been delivered to the Governor for review, unless prior to expiration of the review period and Governor shall approve same, in which case the action shall become effective upon such approval.

NOW, THEREFORE BE IT RESOLVED that Application Number 1981-0556.051 for public development is hereby approved subject to the conditions recommended by the Executive Director.

**Record of Commission Votes**

AYE	NAY	NP	A/R*	AYE	NAY	NP	A/R*	AYE	NAY	NP	A/R*
		X		Howell	X			Prickett	X		
		X		Jannarone	X			Quinn			X
X				Lloyd	X			Rohan Green			X
		X		Lohbauer	X			Earlen	X		
		X		Pikolycky	X						

\*A = Abstained / R = Recused

Adopted at a meeting of the Pinelands Commission

Date: June 8, 2018

Nancy Wittenberg  
Nancy Wittenberg  
Executive Director

Sean W. Earlen  
Sean W. Earlen  
Chairman



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General Information: Info@njpinelands.state.nj.us  
 Application Specific Information: AppInfo@njpinelands.state.nj.us

Sean W. Earlen  
 Chairman

Nancy Wittenberg  
 Executive Director

May 18, 2018

John Scavelli, Jr. Superintendent (via email)  
 Evesham Township School District  
 25 South Maple Avenue  
 Marlton, NJ 08053

Re: Application # 1981-0556.051  
 Block 51, Lot 3  
 Evesham Township

Dear Mr. Scavelli:

The Commission staff has completed its review of this application for installation of a 1.42 acre ground mounted solar energy facility on the above referenced parcel. Enclosed is a copy of a Public Development Application Report. On behalf of the Commission's Executive Director, I am recommending that the Pinelands Commission approve the application with conditions at its June 8, 2018 meeting.

Any interested party may appeal this recommendation in accordance with the appeal procedure attached to this document. If no appeal is received, the Pinelands Commission may either approve the recommendation of the Executive Director or refer the application to the New Jersey Office of Administrative Law for a hearing.

Prior to any development, the applicant shall obtain any other necessary permits and approvals.

Sincerely,

Charles M. Horner, P.P.  
 Director of Regulatory Programs

Enc: Appeal Procedure

- c: Secretary, Evesham Township Planning Board (via email)
- Evesham Township Construction Code Official (via email)
- Evesham Township Environmental Commission (via email)
- Secretary, Burlington County Planning Board (via email)
- Keith Smith (via email)



Michael and Sheila Abair (via email)  
Jeffrey B. Saber, Esq. (via email)  
Joan Rapetti (via email)  
Bob McCullough (via email)



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General Information: Info@njpines.state.nj.us  
 Application Specific Information: AppInfo@njpines.state.nj.us

Sean W. Earlen  
 Chairman

Nancy Wittenberg  
 Executive Director

**PUBLIC DEVELOPMENT APPLICATION REPORT**

May 18, 2018

John Scavelli, Jr, Superintendent (via email)  
 Evesham Township School District  
 25 South Maple Avenue  
 Marlton, NJ 08053

Application No.: 1981-0556.051  
 Block 51, Lot 3  
 Evesham Township

This application proposes installation of a 1.42 acre ground mounted solar energy facility on the above referenced 22.5 acre parcel in Evesham Township. The solar energy facility is proposed as an accessory use to the existing Richard Rice Elementary School.

The proposed solar energy facility will provide approximately forty nine percent of the total electricity demand of the Richard Rice Elementary School.

In 1981, the Pinelands Commission approved a Waiver of Strict Compliance (Waiver) for the development of 4,500 dwelling units and certain other facilities on a 1,784 acre parcel which included the above referenced 22.5 acre parcel (App. No. 1981-0556.001). That development is commonly referred to as Kings Grant. The Richard Rice Elementary School was one of the other facilities approved by the Waiver. The Waiver also approved the development of athletic fields associated with the school. The proposed solar facility will be located in an existing grassed area that contains one of the athletic fields that was approved by the Waiver.

**STANDARDS**

The Commission staff has reviewed the proposed development for consistency with all standards of the CMP. The following reviews the CMP standards that are relevant to this application:

Land Use (N.J.A.C. 7:50-5.26)

The proposed development is located in a Pinelands Rural Development Area. The proposed development of a solar energy facility as an accessory use to the existing school is a permitted land use in a Pinelands Rural Development Area.

Wetlands Standards (N.J.A.C. 7:50-6.6)

There are wetlands located on the parcel. The proposed solar energy facility will be located at least 50 feet from wetlands and no closer to wetlands than the existing recreational fields. The proposed development will not result in an irreversible adverse impact on wetlands.

Vegetation Management Standards (N.J.A.C. 7:50-6.23 & 6.26)

The proposed development will be located in an existing grassed athletic field. The proposed soil disturbance is limited to that which is necessary to accommodate the proposed development.

The Landscaping and Revegetation guidelines of the CMP recommend the use of grasses that are tolerant of droughty, nutrient poor conditions. To stabilize the disturbed areas, the applicant proposes to utilize a seed mixture that meets that recommendation.

Stormwater Management Standards (N.J.A.C. 7:50-6.84(a)6)

The Pinelands Protection Act was amended in 2010 to prohibit the Pinelands Commission from including the actual solar panels as impervious surface or impervious cover in any stormwater management calculation in the Pinelands Area. The solar panel mounting posts and associated grading will disturb less than 5,000 square feet. Based upon this limited disturbance, the application is not required to address the CMP stormwater management standards.

Cultural Resource Standards (N.J.A.C. 7:50-6.151)

A cultural resource survey was prepared for this application. It was determined that there were no cultural resources eligible for Pinelands designation within the project area.

**PUBLIC COMMENT**

The applicant has provided the requisite public notices. Notice to required land owners within 200 feet of the above referenced parcel was completed on December 13, 2017. Newspaper public notice was completed on February 8, 2018. The application was designated as complete on the Commission's website on May 1, 2018. The Commission's public comment period closed on May 11, 2018. The Commission received six written public comments regarding this application.

Commenter #1: The commenter submitted a copy of an email that was apparently intended for an addressee other than the Commission. The commenter indicated that the Pinelands Commission is proposing to destroy part of the Pinelands through the installation of a solar panel array and the commenter is seeking assistance to protest and to stop the proposed development.

Staff Response: The Commission staff appreciates the commenter's concern for the Pinelands. The Commission is not proposing the development of the solar energy facility. The Commission is reviewing an application filed by the Evesham Township Board of Education to develop the proposed solar energy facility. Based upon Commission staff review, the proposed development meets all of the standards contained in the CMP.

Commenters #2:

The commenters, residents of Villa Royale, an adjacent resident development, are opposed to the proposed development. The commenters indicated that they did not receive appropriate notification regarding this application. The commenters are concerned with impacts to stormwater runoff and wildlife. The commenters also requests information regarding the Commission's formal appeal process.

In addition, the commenters also raised concerns regarding why a roof top solar array could not be installed, the rationale for the number of proposed solar panels, the costs associated with the project, "the benefits in the utilization of said excessive panels beyond the scope of the Richard L. Rice School" and the rationale for locating the proposed solar array in a location that will allow for view of the solar array by surrounding residential dwellings, as opposed to locating the array out of sight.

Staff Response:

The CMP requires that notice be provided to all property owners within 200 feet of the parcel proposed for development. The commenters' address was included on the list of property owners within 200 feet of the above referenced lot that was provided to the applicant by Evesham Township. As required by the CMP, the Commission staff received a copy of the certified mail receipt documenting that the public notice was mailed to the commenters' address.

As indicated in the Public Development Application Report, the Pinelands Protection Act was amended to 2010 to prohibit the Pinelands Commission from including solar panels as impervious surface or impervious cover in any stormwater management calculations in the Pinelands Area. The solar panel mounting posts and associated grading will disturb less than 5,000 square feet. Based upon this limited disturbance, the application is not required to address the CMP stormwater management standards.

Based upon Commission staff review, the proposed development of a solar energy facility on an existing cleared athletic field will not result in disturbance of essential wildlife habitat.

The commenters are receiving a copy of the Executive Director's Public Development Application Report which contains the appeal procedures.

The Commission staff appreciates the remaining concerns expressed by the commenters. However, the commenters' remaining concerns are not matters regulated by the CMP. Since the solar energy facility is proposed as an accessory use to the existing school, the CMP does not require that the proposed solar energy facility be located or screened as viewed from existing residential dwellings on contiguous parcels. For informational purposes, the proposed solar facility will be located in an existing grassed area. No trees are proposed to be cleared. The proposed solar facility will be located approximately 120 feet from the nearest residential unit. There is an existing wooded area, ranging in width between 60 feet and 120 feet, located between the proposed solar facility and the existing residential dwellings. The commenters may wish to contact the Evesham Township Board of Education to discuss property buffering concerns and for further information regarding these concerns.

- Commenters #3 Commenters #3 (additional comments submitted by commenters #2) reiterates the comments expressed above by commenters #2 and expresses an additional concern regarding the vandalism of their home in the Villa Royale development.
- Staff Response: The Commission staff appreciates the concerns of the commenters. The Commission's regulations do not address vandalism. For the remaining concerns, please refer to the Commission staff responses to Commenters #2.
- Commenter #4: An attorney representing the Villa Royale Homeowner's Association commented that, although the homeowner's association does not object to the application, they request that a sufficient buffer be maintained so as to not affect the residents of the Villa Royale community.
- Staff Response: The Commission staff appreciates the concerns of the commenter. Please refer to the Commission staff response to commenters #2 regarding buffering of the proposed solar facility. The commenter may wish to contact the Evesham Township Board of Education to discuss property buffering concerns.
- Commenter #5: The commenter is opposed to the use of a ground mounted solar array and feels that it is an infringement of the open space adjacent to their property.
- Staff Response: The Commission staff appreciates the concerns of the commenter. The CMP permits a solar facility on the parcel. The Commission staff has no information to indicate that the concerned area is legally restricted to open space. The commenter may wish to contact the Evesham Township Board of Education for further information regarding this matter.
- Commenter #6: The commenter requested a copy of the Executive Director's findings and conclusions.
- Staff Response: The commenter will receive a copy of the Executive Director's Public Development Application Report.

### CONDITIONS

1. Except as modified by the below conditions, the proposed development shall adhere to the plan, prepared by French & Parrello Associates, dated December 11, 2017 and revised to May 1, 2018.
2. Disposal of any construction debris or excess fill may only occur at an appropriately licensed facility.
3. Any proposed revegetation shall adhere to the "Vegetation" standards of the CMP. Where appropriate, the applicant is encouraged to utilize the following Pinelands native grasses for revegetation: Switch grass, Little bluestem and Broom-sedge.
4. Prior to any development, the applicant shall obtain any other necessary permits and approvals.

5. All development, including clearing and land disturbance, shall be located at least 50 feet from wetlands.

### CONCLUSION

As the proposed development conforms to the standards set forth in N.J.A.C. 7:50-4.57, it is recommended that the Pinelands Commission **APPROVE** the proposed development subject to the above conditions.



Philip D. Murphy  
Governor

Sheila Y. Oliver  
Lt. Governor

## State of New Jersey

THE PINELANDS COMMISSION

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Application Specific Information: [AppInfo@njpines.state.nj.us](mailto:AppInfo@njpines.state.nj.us)



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Nancy Wittenberg  
Executive Director

### **PINELANDS COMMISSION** **APPEAL PROCEDURE**

The Pinelands Comprehensive Management Plan (N.J.A.C. 7:50-4.91) provides an interested party the right to appeal any determination made by the Executive Director to the Commission in accordance with N.J.A.C. 7:50-4.91. An interested party is someone who has a specific property interest sufficient to require a hearing on constitutional or statutory grounds. Only appeal requests submitted by someone meeting the definition of an interested party will be transmitted to the New Jersey Office of Administrative Law for a hearing. Any such appeal must be made in writing to the Commission, received at the Commission office not later than 5:00 PM on June 5, 2018 and include the following information:

1. the name and address of the person requesting the appeal;
2. the application number;
3. the date on which the determination to be appealed was made;
4. a brief statement of the basis for the appeal; and
5. a certificate of service (a notarized statement) indicating that service of the notice has been made, by certified mail, on the clerk of the county, municipal planning board and environmental commission with jurisdiction over the property which is subject of this decision.

Within 15 days following receipt of a notice of valid appeal, the Executive Director shall initiate the procedures for assignment of an Administrative Law Judge to preside at the hearing pursuant to the Administrative Procedures Act, N.J.S.A. 52:14B-1 et seq., and the procedures established by the Office of Administrative Law. The time, date and location of such hearing shall be designated by the Office of Administrative Law.

**From:** comments  
**To:** ABAIR, SHEILA  
**CC:** AppInfo  
**Date:** 1/31/2018 2:02 PM  
**Subject:** Re: Opposition to Pinelands Application 1981-0556-051

By copy of this email, I am forwarding your letter to our Project Review Office.  
Betsy Piner  
(for the Planning Office)

>>> SHEILA ABAIR <[abairms@comcast.net](mailto:abairms@comcast.net)> 1/31/2018 1:24 PM >>>

To whom it may concern...Thank you all for your time, dedication and above all your caring concern in preserving our pinelands...I only recently was made aware of your Alliance...Please forgive me..

I had written and sent the attached letter in response to a letter recieved from the Pinelands Commision informing us of there intent to literally destroy (part of pinelands)less then 200 foot from our home.

They informed us that all the land will be set up with solar panels.

We would greatly appreciate any assistance and direction you could give us to not only protest but stop them from doing this...

Thank You, Thank You, Thank you

Michael J Abair

To: New Jersey Pinelands Commission; The Evesham Township Board of Education  
From: Michael and Sheila Abair; Property Owners, Unit 46 Five Crown Royale  
RE: Application Number 1981-0556.051

APP# 1981 0556.051

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January 15, 2018

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To Whom It May Concern:

Please be advised that we, the property owners of 46 Five Crown Royale Circle, and a growing number of deeply concerned neighbors, stand in adamant opposition to the proposal of the construction of a ground mounted solar array within 200 feet of our property.

As a preface to the following particular concerns, please note that sufficient notification of said proposal was not provided according to protocol and that communication of the proposal was delivered, thankfully, by another concerned property owner.

The very thought of the installation of an "array" of anything, literally within feet of the property which we purchased 31 years ago is simply unthinkable and unacceptable for a plethora of reasons, underscoring the following as a mere scratching of the surface of the issues inherent within this proposal:

When we purchased our property 31 years ago, at an additional premium for the back of our home facing what was a forest of trees, we were utterly dismayed at the near immediate deforestation which occurred for the purposes of laying a field which would eventually fall below the construction of Richard L. Rice Elementary School. The impact of that latter construction had a lasting effect on the units within Villa Royale at a higher elevation, causing excess water run-off and trenching which has gradually trickled down to our lower units causing flooding and further destruction of the few trees which remain in our "premium view." Further excavation of grounds adjacent to the units proposed is a guarantee for accelerated flooding and assurance of an irreversible interference with the preservation of the limited foliage behind each of our units. Wildlife, already suffering the remnant impact of condensed space, to the point of frequently corralling directly behind our homes, would be further compromised in a such a way that we find, quite frankly, deeply offensive in its issuance through a Commission entrusted with ecological preservation and trusted with ecologically sound and wild-life sensitive consultation.

As actively engaged stewards of the environment at the local level in a world gone "green," the following are but a brief sketch of the questions we wish to direct at those responsible for the issuance of this proposal:

- 1.) According to local media, each of the school systems in Evesham Township are moving towards the utilization of solar energy; progress to be recognized and celebrated! What is the rationale for the interference of wildlife, assured and traumatic deforestation due to flooding and industrialization of what little piece of the PINELANDS which remain behind the 51 units cited in this proposal when each of the other school systems will adopt the uniform ecologically sound measure of the installation of solar units upon the roofs of their buildings?
- 2.) As fiduciary stewards, equally concerned with the costs associated with any constructions which occurs within Evesham township, what is the rationale for the excessive number of panels, the costs associated with such a project and the benefits in the utilization of said excessive panels beyond the scope of Richard L. Rice School?
- 3.) As a community of concerned property owners who have specifically selected homes with the added benefit of connection with the limited natural beauty which remains within our view, what is

the rationale for a proposal to distract from the unique window into the wilderness which our homes graciously afford us when the clear protocol for the construction and arrangement of an array of solar units is near uniformly limited to corporate parks, well out of the sight of homeowners who also happen to be bird-watchers, garden-tenders and lovers of the land?

The aforementioned questions are but a starting point to the request for an appeal which will be carried out with the magnitude of an entire community outraged at the very thought of such an outrageous, intrusive and ecologically irresponsible action.

We thank you, in advance, for your careful consideration of our concerns, prompt response and, as necessary, disclosure of any requirements to initiate a formal appeal process which we will spearhead as soon as possible. We furthermore encourage you, should it be necessary, to be in anticipation of a community-wide appeal which will go to exhaustive measures, under the guidance of legal counsel as may be required, to prevent this gravely erroneous proposal from ever leaving the page upon which it was carelessly drafted.

Very Sincerely,



Michael and Sheila Abair  
46 Five Crown Royale  
Marlton, NJ 08053  
abairms@comcast.net  
(609) 678-5376  
(856) 701-2309

**From:** SHEILA ABAIR <abairms@comcast.net>  
**To:** <Appinfo@njpinelands.state.nj.us>  
**Date:** 1/11/2018 10:22 PM  
**Subject:** Solar Array @ Rice School Pinelands Application 1981-0556.051

To whom it may concern

We are property owners at 46 Five Crown Royale, Villa Royale in Kings Grant. We are certainly within 200' of proposed installation of solar panels.....we are probably 40' away...We DID NOT receive any notice, we heard from our neighbor..

We are adamantly AGAINST any solar panels or ANYTHING being installed literally within feet of our property....

When we purchased our home 31 years ago, we paid an additional premium of 2500.00 for having our back facing the woods...as your aware, almost immediately the forest, woods, trees were cut down and became a field...We have so little trees in our back that, what little we have certainly WOULD NOT prevent us from having to look at solar panels in the premium location that we choose no less....

Wildlife, Water Runoff causing more water problems that we are all already experiencing, Vandalism, are but just the Tip of the iceberg on impacting all of our homes.

Why NOT on the Roof of the School? Like all the other schools...and buildings utilizing solar energy.

WE WOULD OF COURSE LIKE A COPY OF FINDINGS AND CONCLUSION

We DISAGREE, We PROTEST and want you to reply to this email and ...

WE CERTAINLY REQUEST AN APPEAL AGAINST THIS EVEN BEING CONSIDERED

Sincerely

Michael and Sheila Abair

46 Five Crown Royale

Marlton, N.J. 0805

abairms@comcast.net mailto:abairms@comcast.net

856 701-2309

609 678-5376

**Jeffrey B. Saper, Esquire**

180 Tuckerton Road, Suite 2

Medford, New Jersey 08055

Telephone: 609 868 5336

E-Mail: [jbsaperlaw@comcast.net](mailto:jbsaperlaw@comcast.net)

Member NJ Bar

January 11, 2018

SENT VIA FAX MAIL (609-894-7331) AND E-MAIL ([AppInfo@njpines.state.nj.us](mailto:AppInfo@njpines.state.nj.us))

NJ Pinelands Commission

PO Box 359

New Lisbon, NJ 08064

RE: Pinelands Application No. 1981-0556.051-Evesham Board of Education  
Construction of Ground Mounted Solar Array- Block 51, Lot 3

Dear Sirs:

I represent the Villa Royale Home Owners Association, whose property is adjacent to the proposed construction project. I am in receipt of the Notice regarding referenced application, and I submit the following comment on behalf of the Association. As The Association does not object to this application; however, the Association respectfully submits that said construction and installation be performed in such a manner affect the residents of the Villa Royale community, and that sufficient buffer (vegetation or otherwise) be required so as to not affect the residents of the Villa Royale community.

Thank you for your courtesies and consideration in this matter.

Respectfully submitted,

Jeffrey B. Saper, Esq.,

Attorney for Villa Royale

Home Owners Association

**From:** Mike DelGais <mdelgais@aol.com>  
**To:** <appinfo@njpines.state.nj.us>  
**Date:** 12/27/2017 2:15 PM  
**Subject:** Pine lands application # 1981-0556.061

I am a property owner with in 200' of this proposed project site. I am apposed to the use of ground mounted solar panels on this site. I feel it is an infringement of the open space adjacent to my property. I am requesting a copy of the Executive Director's findings.

Regards,  
Joan Rapetti  
42 Five Crown Royal Circle  
Marlton, NJ, 08053

Sent from my iPhone

**AppInfo - Pinelands Application 1981-0556-.051**

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**From:** BOB MCCULLOUGH <volleyball\_bob@yahoo.com>  
**To:** "Appinfo@njpines.state.nj.us" <Appinfo@njpines.state.nj.us>  
**Date:** 12/16/2017 10:28 AM  
**Subject:** Pinelands Application 1981-0556-.051  
**CC:** ROBERT MCCULLOUGH <volleyball\_bob@yahoo.com>

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I am a property owner (77 Five Crown Royal Circle) within 200' of the Project Site for Subject Application of The Evesham Board of Education to construct a Ground-Mounted Solar Array.

I did receive written notice of the application.

I am herewith requesting a copy of the Executive Director's findings and conclusion relative to this application and project.

Robert W. McCullough  
5 Cardinal Place  
Barnegat, NJ 08005



## RESOLUTION OF THE NEW JERSEY PINELANDS COMMISSION

NO. PC4-18- 17

**TITLE:** Issuing an Order to Certify Ordinance 6-2018, Amending Chapter 144 (Land Development) of the Code of Mullica Township

Commissioner Lohbauer moves and Commissioner Pikolycky seconds the motion that:

**WHEREAS**, on February 3, 1984, the Pinelands Commission fully certified the Master Plan and Land Use Ordinances of Mullica Township; and

**WHEREAS**, Resolution #PC4-84-11 of the Pinelands Commission specified that any amendment to the Township's certified Master Plan and Land Use Ordinances be submitted to the Executive Director in accordance with N.J.A.C. 7:50-3.45 (Submission and Review of Amendments to Certified Master Plans and Land Use Ordinances) of the Comprehensive Management Plan to determine if said amendment raises a substantial issue with respect to conformance with the Pinelands Comprehensive Management Plan; and

**WHEREAS**, Resolution #PC4-84-11 further specified that any such amendment shall only become effective as provided in N.J.A.C. 7:50-3.45 of the Comprehensive Management Plan; and

**WHEREAS**, on March 27, 2018, Mullica Township adopted Ordinance 6-2018, amending Chapter 144 (Land Development) of the Township's Code by revising permitted uses, water quality standards and zoning boundaries applicable to the WV (Weekstown Village) District; and

**WHEREAS**, the Pinelands Commission received a certified copy of Ordinance 6-2018 on April 4, 2018; and

**WHEREAS**, by letter dated April 6, 2018, the Executive Director notified the Township that Ordinance 6-2018 would require formal review and approval by the Pinelands Commission; and

**WHEREAS**, a public hearing to receive testimony on Ordinance 6-2018 was duly advertised, noticed and held on April 25, 2018 at the Richard J. Sullivan Center, 15C Springfield Road, New Lisbon, New Jersey at 9:30 a.m.; and

**WHEREAS**, the Executive Director has found that Ordinance 6-2018 is consistent with the standards and provisions of the Pinelands Comprehensive Management Plan; and

**WHEREAS**, the Executive Director has submitted a report to the Commission recommending issuance of an order to certify that Ordinance 6-2018 is in conformance with the Pinelands Comprehensive Management Plan; and

**WHEREAS**, the Commission's CMP Policy and Implementation Committee has reviewed the Executive Director's report and has recommended that Ordinance 6-2018 be certified; and

**WHEREAS**, the Pinelands Commission has duly considered all public testimony submitted to the Commission concerning Ordinance 6-2018 and has reviewed the Executive Director's report; and

**WHEREAS**, the Pinelands Commission accepts the recommendation of the Executive Director; and

**WHEREAS**, pursuant to N.J.S.A. 13:18A-5H, no action authorized by the Commission shall have force or effect until ten (10) days, Saturdays, Sundays and public holidays excepted, after a copy of the minutes of the meeting of the Commission has been delivered to the Governor for review, unless prior to expiration of the review period the Governor shall approve same, in which case the action shall become effective upon such approval.

**NOW, THEREFORE BE IT RESOLVED that**

1. An Order is hereby issued to certify that Ordinance 6-2018, amending Chapter 144 (Land Development) of the Code of Mullica Township, is in conformance with the Pinelands Comprehensive Management Plan.
2. Any additional amendments to Mullica Township's certified Master Plan and Land Use Ordinances shall be submitted to the Executive Director in accordance with N.J.A.C. 7:50-3.45 to determine if said amendments raise a substantial issue with respect to the Comprehensive Management Plan. Any such amendment shall become effective only as provided in N.J.A.C. 7:50-3.45.

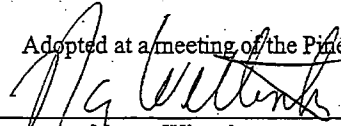
**Record of Commission Votes**

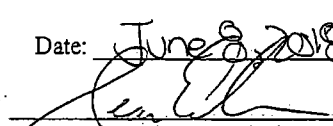
AYE NAY NP A/R*				AYE NAY NP A/R*				AYE NAY NP A/R*			
Ashmun			X	Howell	X			Prickett	X		
Avery			X	Jannarone	X			Quinn			X
Barr				Lloyd	X			Rohan Green			X
Chila			X	Lohbauer	X			Earlen	X		
Galletta			X	Pikolycky	X						

\*A = Abstained / R = Recused

Adopted at a meeting of the Pinelands Commission

Date: June 8, 2018

  
 Nancy Wittenberg  
 Executive Director

  
 Sean W. Earlen  
 Chairman



State of New Jersey  
 THE PINELANDS COMMISSION  
 PO Box 359  
 New Lisbon, NJ 08064  
 (609) 394-7300  
 www.nj.gov/pinelands



Philip D. Murphy  
 Governor

Stella Y. Olivero  
 Lt. Governor

General Information: info@pinelands.state.nj.us  
 Application Specific Information: ApplInfo@pinelands.state.nj.us

Sean W. Eadsen  
 Chairman

Nancy Wittenberg  
 Executive Director

**REPORT ON ORDINANCE 6-2018, AMENDING CHAPTER 144  
 (LAND DEVELOPMENT) OF THE CODE OF MULLICA TOWNSHIP**

May 18, 2018

Mullica Township  
 PO Box 317  
 Elwood, NJ 08217

**FINDINGS OF FACT**

I. Background

The Township of Mullica is located in western Atlantic County, in the central portion of the Pinelands Area. Pinelands municipalities that abut Mullica Township include Washington Township in Burlington County and Egg Harbor City, the Town of Hammonton and the townships of Galloway and Hamilton in Atlantic County.

On February 3, 1984, the Pinelands Commission fully certified the Master Plan and Land Use Ordinances of Mullica Township.

On March 27, 2018, Mullica Township adopted Ordinance 6-2018, amending Chapter 144 (Land Development) of the Code of Mullica Township by revising permitted uses and water quality standards applicable in the WV (Weekstown Village) District. Ordinance 6-2018 also revises the boundary of the WV District. The Pinelands Commission received a certified copy of Ordinance 6-2018 on April 4, 2018.

By letter dated April 6, 2018, the Executive Director notified the Township that Ordinance 6-2018 would require formal review and approval by the Pinelands Commission.

II. Master Plans and Land Use Ordinances

The following ordinance has been submitted to the Pinelands Commission for certification:

- \* Ordinance 6-2018, amending Chapter 144 (Land Development) of the Code of Mullica Township, introduced on February 27, 2018 and adopted March 27, 2018.

The above-mentioned ordinance has been reviewed to determine whether it conforms with the standards for certification of municipal master plans and land use ordinances as set out in N.J.A.C. 7:50-3.39 of the Pinelands Comprehensive Management Plan. The findings from this review are presented below. The numbers used to designate the respective items correspond to the numbers used to identify the standards in N.J.A.C. 7:50-3.39.

**1. Natural Resource Inventory**

Not applicable.

**2. Required Provisions of Land Use Ordinance Relating to Development Standards**

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Ordinance 6-2018 amends Chapter 144 (Land Development) of the Code of Mullica Township by expanding the list of permitted uses in the WV (Weekstown Village) District. Specifically, Ordinance 6-2018 adds boat building, repair and sales as a permitted use. Ordinance 6-2018 also amends the Township's Zoning Map by expanding the boundaries of the WV District to include a portion of one lot (Block 5401, Lot 2) (see Exhibit #1). The lot in question is situated on Green Bank Road and contains the existing Viking Yachts boat building facility. As noted, only a portion of Block 5401, Lot 2 is being rezoned; the remainder of the property will continue to be located in the PA (Preservation Area) District. In total, Ordinance 6-2018 adds approximately 40 acres to the WV District.

The WV District comprises the Pinelands Village of Weekstown in Mullica Township, which is located in the northeastern corner of the municipality. Permitted uses in the WV District include single family detached dwellings on five acre lots, agriculture, agricultural commercial establishments, forestry, campgrounds, schools, churches, home occupations and bed and breakfast inns. As currently certified, Weekstown Village contains approximately 370 acres of land and 50 existing homes or principal non-residential structures. Future development potential in the village is quite limited, due to the five acre lot size requirement established by the Township, the lack of sewer infrastructure and wetlands constraints (see Exhibit #2). At most, an additional 15 homes or 95,000 square feet of nonresidential space might be feasible.

As is evident from Exhibit #2, the boundaries of Weekstown Village were carefully delineated when Mullica Township's land use ordinances were originally certified by the Commission in 1984. Existing developed properties along and at the intersections of Pleasant Mills, Green Bank and Weekstown Roads were included, with wetlands generally serving as the outer boundary of the Village. Where wetlands areas were included in the Village, it was because they comprised portions of developed lots or the edges of vacant, developable properties. One large farm in the northern portion of the Village was also included and has since been protected through the State's Farmland Preservation Program.

It is unclear why the property containing the boat building facility (then known as Ocean Yachts) was not included in Weekstown Village when Mullica Township was first certified. The boat

building facility has been in operation on this site since 1977, several years before the CMP was adopted. Normally, a nonresidential use of such significant size located on the boundary of a development-oriented Pinelands management area would be included in that management area. That did not happen in this case, perhaps due to the presence of intervening wetlands between the edge of the Village and the existing buildings on the Viking Yachts property. More likely, the implications of excluding the facility from the Village, thereby rendering it a nonconforming use in the Preservation Area District, were not yet fully understood. In the Pinelands Area, pre-existing nonconforming uses are governed by N.J.A.C. 7:50-5.2, which allows such uses to continue and expand under certain conditions. These conditions include a limitation on expansion to "50 percent of the floor area, the area of the use or the capacity of the use on January 14, 1981." This particular facility was able to continue operating and expand over the past three decades but has arguably reached the 50 percent limit in floor area, area and/or capacity. Rezoning the property to the Pinelands Village makes the existing boat building facility a permitted use, no longer subject to N.J.A.C. 7:50-5.2(b). Outward expansion of the facility will still not be permitted due to the presence of wetlands and required wetlands buffers; however, redevelopment within the existing building footprint will now be feasible, as will an increase in employees and connection of existing buildings (over existing impervious surfaces) for additional floor area or office space. In short, the zoning change merely recognizes and encompasses an existing business, enhancing its long-term viability without allowing development of additional lands. Because this management area change (from Preservation Area District to Pinelands Village) involves a developed property and is essentially a correction of a prior management area line, no offsetting management area changes are necessary.

Ordinance 6-2018 makes one other amendment of note to Chapter 144 that will affect the rezoned property. Specifically, Ordinance 6-2018 expands the categories of development in Weekstown Village that will be allowed to use contiguous lands outside the Village for septic dilution purposes. Normally, N.J.A.C. 7:50-6.84(a)4iii and 5v of the CMP permit only single family dwellings on existing lots, nonresidential development on lots of five or fewer acres and residential cluster developments to use lands in other management areas or zoning districts for dilution. Ordinance 6-2018 provides this same opportunity for the expansion of nonresidential uses in the WV District, provided that the nonresidential use is in existence as of the effective date of the ordinance and that any contiguous lands outside the WV District used for dilution are in common ownership as of the effective date of the ordinance with the lot containing the existing nonresidential use. Based on this amendment, septic dilution calculations for the Viking Yachts facility will take into consideration the entirety of Block 5401, Lot 2 (71 acres), rather than only the 40 acres now located in the WV District. This will allow increased future employment at the facility and greater redevelopment flexibility within the existing building footprint. The alternative would have been to redesignate all 71 acres of the property from Preservation Area District to Pinelands Village, an inappropriate outcome given the northern portion of the parcel is vacant and undevelopable.

Allowing lands in a different management area and zoning district to be used to meet septic dilution requirements for expansion of nonresidential uses, regardless of lot size, is not something the CMP normally permits. However, this does not automatically render the Township's ordinance inconsistent with the CMP. Pinelands municipalities have the ability to refine the various standards and provisions of the CMP and tailor them to local conditions,

provided CMP goals and objectives continue to be achieved. In this case, Mullica Township has chosen to adopt an ordinance that allows pre-existing nonresidential development in one of its village zoning districts to use lands already in common ownership for purposes of septic dilution. Based on the information available, an analysis of Weekstown Village reveals that this provision will be of extremely limited applicability. In all likelihood, the Viking Yachts facility is the only existing nonresidential use in the WV District that owns vacant contiguous lands outside the Village boundary. The standards adopted by Ordinance 6-2018 recognize that the facility is already using lands in the Preservation Area District for dilution purposes and allow that to continue after the zoning change. This represents an appropriate exercise of municipal flexibility, one that meets the objectives of the CMP.

The revised zoning boundaries, permitted uses and water quality standards adopted by Ordinance 6-2018 are consistent with the land use and development standards of the CMP. Therefore, this standard for certification is met.

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It should be noted that by adding lands to the WV District, Ordinance 6-2018 expands the area in Mullica Township in which sewer service is permitted. This will necessitate the submission of an Atlantic County Water Quality Management Plan revision to the New Jersey Department of Environmental Protection for review and approval.

**3. Requirement for Certificate of Filing and Content of Development Applications**

Not applicable.

**4. Requirement for Municipal Review and Action on All Development**

Not applicable.

**5. Review and Action on Forestry Applications**

Not applicable.

**6. Review of Local Permits**

Not applicable.

**7. Requirement for Capital Improvement Program**

Not applicable.

8. **Accommodation of Pinelands Development Credits**

Not applicable.

9. **Referral of Development Applications to Environmental Commission**

Not applicable.

10. **General Conformance Requirements**

Ordinance 6-2018 is consistent with standards and provisions of the Pinelands Comprehensive Management Plan.

This standard for certification is met.

11. **Conformance with Energy Conservation**

Not applicable.

12. **Conformance with the Federal Act**

Ordinance 6-2018 is consistent with standards and provisions of the Pinelands Comprehensive Management Plan. No special issues exist relative to the Federal Act.

This standard for certification is met.

13. **Procedure to Resolve Intermunicipal Conflicts**

The amendments adopted by Ordinance 6-2018 do not impact lands located along Mullica Township's boundary with any adjoining municipalities. Therefore, intermunicipal conflicts are not anticipated. This standard for certification is met.

## PUBLIC HEARING

A public hearing to receive testimony concerning Mullica Township's application for certification of Ordinance 6-2018 was duly advertised, noticed and held on April 25, 2018 at the Richard J. Sullivan Center, 15C Springfield Road, New Lisbon, New Jersey at 9:30 a.m. Ms. Grogan conducted the hearing, at which no testimony was received.

Written comments on Ordinance 6-2018 were accepted through May 2, 2018 and received from the following individuals:

May 1, 2018 letter from Katherine Smith, Policy Advocate, Pinelands Preservation Alliance (see Exhibit #3)

May 1, 2018 letter from Chris Babek, Plant Engineering Manager, Viking Yachts (see Exhibit #4)

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May 1, 2018 letter from John Leek, IV (see Exhibit #5)

## EXECUTIVE DIRECTOR'S RESPONSE

On behalf of the Pinelands Preservation Alliance, Ms. Smith raises two concerns with Ordinance 6-2018. First, the ordinance adopts a zoning change that will result in wetlands habitat being added to a Pinelands Village, which Ms. Smith submits is inconsistent with N.J.A.C. 7:50-5.16. Second, the ordinance permits lands in other management areas and zoning districts to be used for septic dilution purposes in situations where the CMP (N.J.A.C. 7:50-6.84(a)4 and 5) does not. Ms. Smith suggests these amendments are evidence of the Township's attempts "to manipulate an area intended for preservation".

Ms. Smith's letter makes reference to the CMP's guidelines for delineation of Pinelands Village boundaries, including N.J.A.C. 7:50-5.16(a)5, which specifies that villages should not intrude into wetlands vegetation associations. The Executive Director agrees that this guideline should be followed to the greatest extent practicable, as the CMP directs. Accordingly, the area added to Weekstown Village has been limited to the developed portion of Block 5401, Lot 2 and surrounding areas already used for storage, parking and an existing septic system. The strip of wetlands between the existing Village boundary and the developed portion of Block 5401, Lot 2 is included only to ensure contiguity of the Village as a whole. The mere fact that there are wetlands on a property does not preclude its incorporation in a Pinelands Village. This is particularly true when the property in question is already developed. The zoning change adopted by Ordinance 6-2018 does not allow development to occur on wetlands or in required wetlands buffers. Rather, it merely changes the status of an existing business from a nonconforming use to a permitted use, thereby providing opportunities for increased employment and redevelopment within the existing building footprint.

With respect to septic dilution requirements, Ms. Smith's letter notes that Ordinance 6-2018 allows for a variation from CMP standards and may have unintended consequences if it applies to properties other

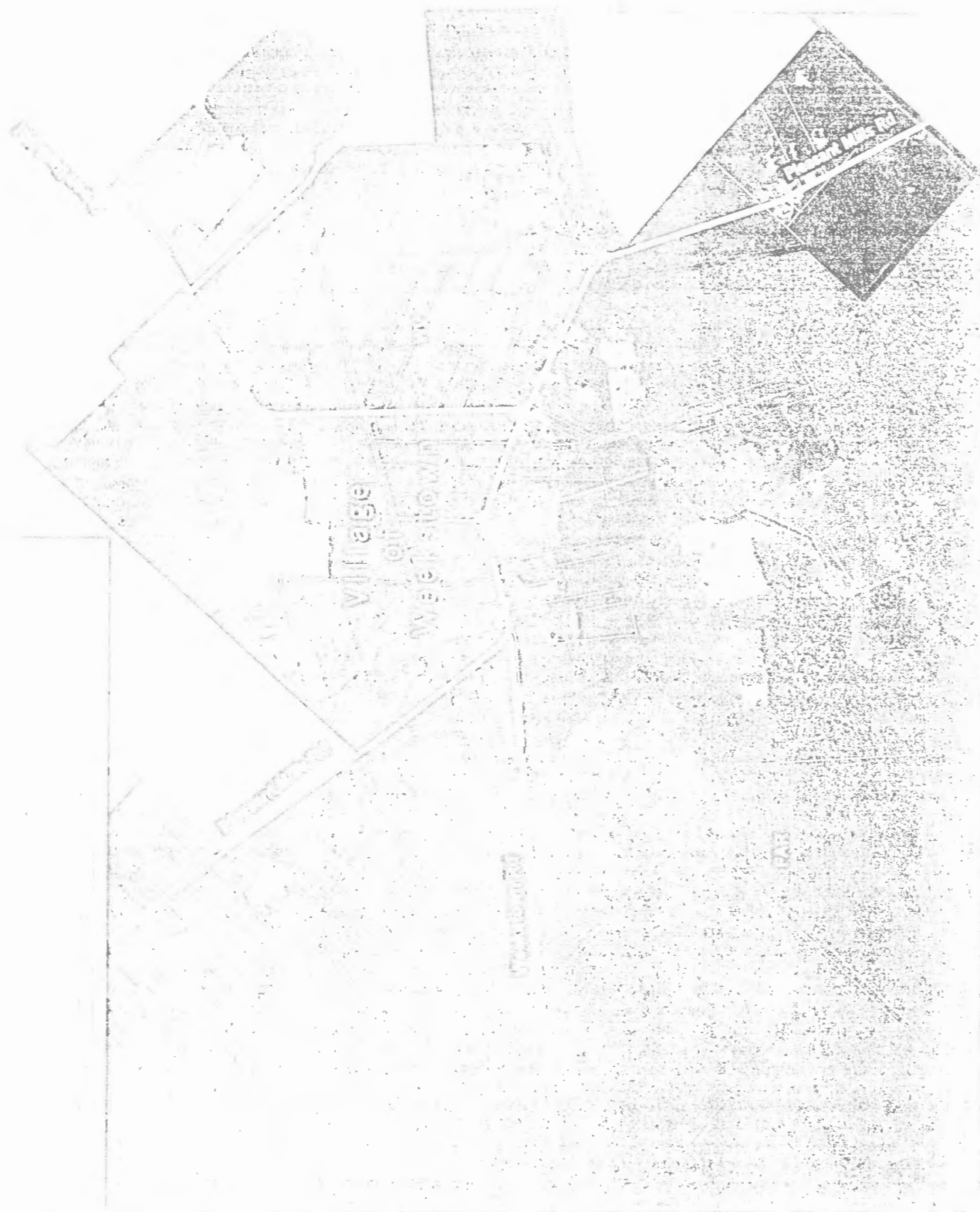
than the Viking Yachts facility. The Executive Director agrees that the standards adopted by Ordinance 6-2018 do not match what a strict interpretation of the CMP would call for. However, N.J.A.C. 7:50-6.84(a)4 and 5 of the CMP do acknowledge that there are circumstances under which lands in other management areas and zoning districts can be used when calculating septic dilution requirements. Here, another exception has been carefully crafted in recognition of pre-existing development. The exception applies only to the expansion of existing nonresidential uses in the WV District, and then only if the contiguous lands to be used for dilution are owned by the nonresidential use as of the effective date of Ordinance 6-2018. Based on the property ownership information available to Commission staff, there is only one property in the WV District that can meet all of the conditions, the Viking Yachts facility.

As discussed in section 2 above, the CMP provides Pinelands municipalities with flexibility in designing and implementing the land use and environmental standards of the CMP in recognition of the fact that modifications may be necessary to accommodate specific local conditions. Here, there is a clear example of a case where adjustments to CMP standards are warranted to recognize pre-existing development. As always when the Preservation Area District is involved, these adjustments must be very carefully considered. If the property affected by Ordinance 6-2018 were vacant, or if the septic dilution standards adopted by Ordinance 6-2018 applied to vacant properties in Weekstown Village, certification would not be recommended. This is not the case. Rather, the amendments made by the ordinance recognize a pre-existing use of substantial size and facilitate the continuation of an industry (boat building) of historical importance to the Township and the Pinelands region. The extent of the zoning change has been appropriately limited, as has the applicability of the new septic dilution requirement.

### CONCLUSION








Based on the Findings of Fact cited above, the Executive Director has concluded that Ordinance 6-2018 is consistent with the standards and provisions of the Pinelands Comprehensive Management Plan. Accordingly, the Executive Director recommends that the Commission issue an order to certify Mullica Township Ordinance 6-2018.

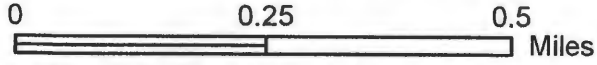
SRG/CMU  
Attachments



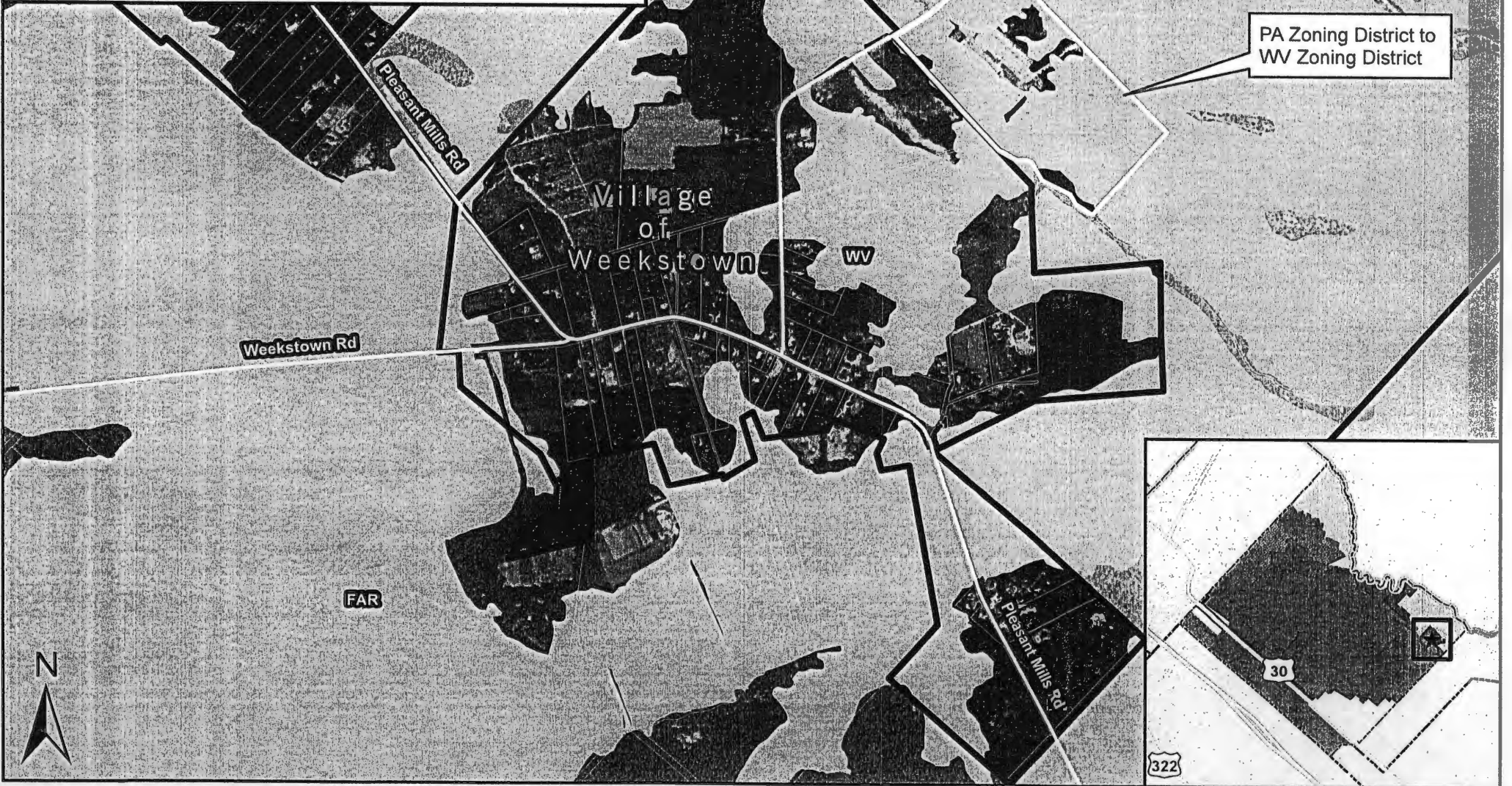
# Mullica Twp. Weekstown Wetlands

## Pinelands Management Areas

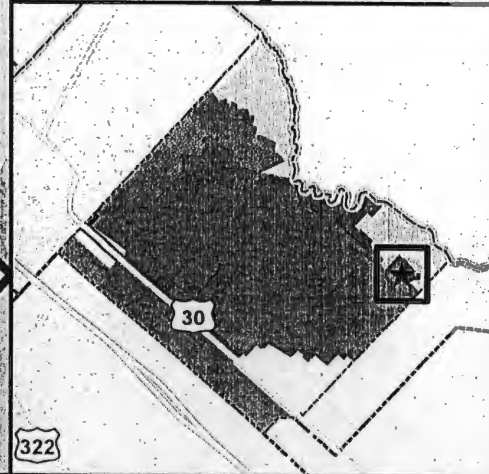
-  Preservation Area District
-  Forest Area
-  Pinelands Village
-  Preservation Area to Pinelands Village
-  Parcels
-  Existing Zoning
-  Wetlands



Executive Director's Report  
Mullica Ordinance 6-2018  
Exhibit 2  
5/18/2018



PA Zoning District to  
WV Zoning District





## PINELANDS PRESERVATION ALLIANCE

Bishop Farmstead ♦ 17 Pemberton Road ♦ Southampton, NJ 08088  
Phone: 609-859-8860 ♦ [ppa@pinelandsalliance.org](mailto:ppa@pinelandsalliance.org) ♦ [www.pinelandsalliance.org](http://www.pinelandsalliance.org)

Susan Grogan, Chief Planner  
New Jersey Pinelands Commission  
15 Springfield Rd  
New Lisbon, NJ 08068

May 1, 2018

**Re: Mullica Township Ordinance 6-2018**

Dear Ms. Grogan,

I am writing on behalf of the Pinelands Preservation Alliance with regard to Mullica Township Ordinance 6-2018, which designates a portion of Block 5401, Lot 2 (Area) currently in the Preservation Area District as part of the Weekstown Village District as well as allows contiguous lands to be used for septic dilution regardless of their zoning district. This ordinance fails to comply with the Comprehensive Management Plan both in spirit and in letter. The township is attempting to manipulate an area intended for preservation that currently serves to protect the Mullica River from runoff and contamination:

N.J.A.C. 7:50-6.84(a)4iii, Minimum standards for point and non-point source discharges, explicitly forbids this type of ordinance:

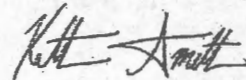
Only contiguous land located within the same municipal zoning district and Pinelands management area as the proposed septic waste water treatment system or systems may be utilized for septic dilution purposes, except for the development of an individual single family dwelling on a lot existing as of January 14, 1981, non-residential development on a lot of five acres or less existing as of January 14, 1981, or cluster development as permitted by N.J.A.C. 7:50-5.19.

The ordinance in question would allow contiguous lands to be used for septic dilution purposes without these key restrictions built into the Comprehensive Management Plan. Even if the development existed as of the 1981 date, Block 5401, Lot 2 is 71 acres, and there is no possibility for clustering non-residential development. In addition to this lot for which the ordinance is proposed, there may be other lots that fit these parameters that the Township and Commission may feel are inappropriate. These protections regarding septic dilution enable the Pinelands Commission and the public to reduce the risk of eutrophication in the Kirkwood-Cohansey. These regulations cannot be manipulated to serve landowners.

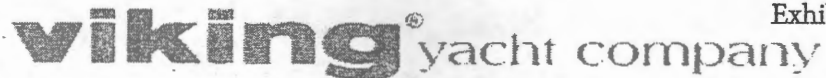
Further, N.J.A.C. 7:50-5.16, Guidelines for the delineation of boundaries of Pinelands Villages, states that "village delineations should not intrude into wetlands vegetation associations." However, virtually the entirety of the Area is wetland habitat per the 2012 New Jersey Department of Environmental Protection Land Use data, in direct violation of this regulation. What is more, there is a documented breeding sighting of the state-threatened barred owl (*Strix varia*), a wetland-dependent species, within the Area.

Per N.J.A.C. 7:50-5.13, the Preservation Area District is "the heart of the Pinelands environment and represents the most critical ecological region in the Pineland" and it "must be protected from development and land use that would adversely affect its long-term ecological integrity." We urge the Commission to uphold the spirit and letter of the Comprehensive Management Plan and work with the town to modify the ordinance.

Sincerely,

A handwritten signature in black ink, appearing to read "Katherine Smith". The signature is stylized and cursive.

Katherine Smith  
Policy Advocate



New Jersey Pinelands Commission  
15 Springfield Road  
P.O. Box 359  
New Lisbon, NJ 08064  
Attn: Ms. Susan R. Grogan, PP, AICP

May 1, 2018

*Via email*

RE: Weekstown Village Expansion  
Township of Mullica, Atlantic County, New Jersey

Dear Ms. Grogan:

Please accept this correspondence in support of the proposed certification of Mullica Township Ordinance 6-2018 by the New Jersey Pinelands Commission. Ordinance 6-2018, which amends Chapter 144 (Land Development) of the Code of Mullica Township by revising permitted uses and water quality standards applicable in the Weekstown Village District, as well as expanding the District, serves to recognize pre-existing uses and development patterns within this portion of the Township. Accordingly, by certifying this Ordinance, the New Jersey Pinelands Commission will aid the Township in correcting an oversight in its zoning district standards and provide for the continued viability of existing enterprise within the Township, all while stewarding and protecting the Township's sensitive natural resources.

The addition of "boat building, repair and sales" to permitted uses in Subchapter 144-135 memorializes a long-standing tradition of family boat-building in the Township. Beginning in 1977, well in advance of the effective date of the Pinelands Protection Act in 1979, this manufacturing facility was not included in the original Weekstown Village Area. By omitting the boat manufacturing facility from the Village, a planning incongruity was created. Ordinance 6-2018 corrects this planning omission Viking Yacht's acquisition of the boat-building enterprise restores the history of family boat-building on-site and charts a course of renewed utility and purpose for this facility

On behalf of Viking Yachts, our employees and partners, I respectfully ask for your support in certifying the Township's Ordinance 6-2018, especially to ensure the legacy of boat-building in the Township which is part of the historical industry in the Pinelands.

Sincerely,

A handwritten signature in black ink that reads "Chris Babek".

Plant Engineering Manager – Viking Yachts

May 1, 2018

Ms. Susan R. Grogan, PP, AICP  
New Jersey Pinelands Commission  
P.O. Box 359  
New Lisbon, NJ 08064

Re: Weekstown Village Ordinance  
Mullica Twp., New Jersey

Dear Ms. Grogan,

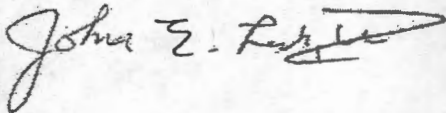
By way of introduction, I am one in a long line of boat builders that have called Block 5401, Lot 2 my professional home. Since 1977, my family has crafted boats on the banks of the Mullica River, and our family's boat-building tradition extends back many generations before that time. Presently, I live adjacent to Lot 2, the boat manufacturing site which is the subject of the Weekstown Village expansion (Ordinance 6-2018), and I am relieved to learn that the Township has taken steps to include the manufacturing plant in the Village.

Please accept my support of the Township's amendment to the Weekstown Village zoning standards and resolution currently under consideration by the Pinelands Commission. Not only does this action make sense from a planning perspective, it also secures a legacy that my family is quite proud of. When my grandfather started building boats on this property, the Pinelands Commission was not yet formed, but he took great effort to be a steward of the lands that surrounded the boat building operations. We continue to have a great appreciation for the natural resources and believe that the Ordinance continues to provide the protections necessary for the Township. The present owners, Viking Yachts, have continued to hold fast to the same responsible land stewardship and clean operations that were always cornerstones of my family's boat-building ethics.

Thank you for considering my input as an adjacent neighbor and Township resident.

Sincerely,

John Leek, IV





## **RESOLUTION OF THE NEW JERSEY PINELANDS COMMISSION**

NO. PC4-18- 18

**TITLE:** To Authorize the Executive Director to Propose Amendments to the Comprehensive Management Plan in Accordance with the Administrative Procedure Act (Alternate Design Wastewater Treatment Systems Pilot Program)

Commissioner Lloyd moves and Commissioner Turnerone seconds the motion that:

**WHEREAS**, on May 10, 2002, the Pinelands Commission adopted amendments to the Comprehensive Management Plan that established the Alternate Design Treatment Systems Pilot Program; and

**WHEREAS**, these Comprehensive Management Plan amendments took effect on August 5, 2002; and

**WHEREAS**, pursuant to N.J.A.C. 7:50-10.23, the Executive Director reviewed this Pilot Program and reported on its implementation to the Commission in November 2006, November 2009 and November 2012; and

**WHEREAS**, based on the Executive Director's recommendations, the Commission adopted amendments to the Alternate Design Treatment Systems Pilot Program to, among other things, allow for continued installation and monitoring of alternate design wastewater treatment systems, recognize the successful performance of three technologies by authorizing them for use on permanent basis, remove two technologies from the Pilot Program due to non-participation and inability to meet Comprehensive Management Plan standards and provide an opportunity for new technologies to participate in the Pilot Program; and

**WHEREAS**, as required by N.J.A.C. 7:50-10.23, the Executive Director again reviewed the Pilot Program and reported on its implementation to the Commission in a report dated November 2017, last revised April 2018; and

**WHEREAS**, the 2017 Implementation Report recommends that the August 5, 2018 installation deadline for pilot program technologies be eliminated from the Comprehensive Management Plan because sufficient other safeguards exist that would allow for immediate suspension of a technology that does not meet CMP water quality standards;

**WHEREAS**, this recommendation and the full Implementation Report were discussed with the Commission's CMP Policy & Implementation Committee on April 27, 2018; and

**WHEREAS**, proposed amendments to the Comprehensive Management Plan to remove the installation deadline for Pilot Program technologies have been prepared and reviewed by the Pinelands Commission; and

**WHEREAS**, the Pinelands Commission wishes to consider the amendments to the Comprehensive Management Plan set forth in the attachment hereto, dated May 30, 2018; and

**WHEREAS**, the Pinelands Commission recognizes the need to proceed with proposal of these amendments as quickly as possible given that the August 5, 2018 installation deadline is rapidly approaching; and

**WHEREAS**, the Administrative Procedure Act of 1968, as amended, and the Office of Administrative Law implementing regulations set forth a detailed procedure governing proposed rulemaking; and

**WHEREAS**, the Pinelands Commission also wishes to obtain the comments of the public, governmental agencies and the Pinelands Municipal Council on the proposed amendments, in accordance with the Pinelands Protection Act and Subchapter 7 of the Comprehensive Management Plan; and

**WHEREAS**, pursuant to N.J.S.A. 13:18A-5h, no action authorized by the Commission shall have force or effect until ten (10) days, Saturdays, Sundays and public holidays excepted, after a copy of the minutes of the meeting of the Commission has been delivered to the Governor for review, unless prior to expiration of the review period the Governor shall approve same, in which case the action shall become effective upon such approval.

NOW, THEREFORE, BE IT RESOLVED that:

1. The Commission hereby authorizes the Executive Director to submit the proposed amendments to the Comprehensive Management Plan, attached hereto and dated May 30, 2018, and the required supporting documentation to the Office of Administrative Law for publication as proposed regulations;
2. The Executive Director shall transmit the proposed amendments to all Pinelands municipalities and counties and the Pinelands Municipal Council for review;
3. The public comment period on the proposed amendments shall extend 60 days from the date of publication of the proposal in the *New Jersey Register* and the Executive Director shall affix the date of a public hearing to receive comments on the proposed amendments; and
4. Subsequent to the comment period, the Executive Director shall expeditiously prepare proposed final amendments, with any pertinent changes to these amendments, for review by the Commission's CMP Policy and Implementation Committee, and shall submit same to the Commission for final action.

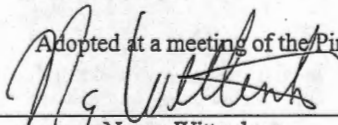
**Record of Commission Votes**

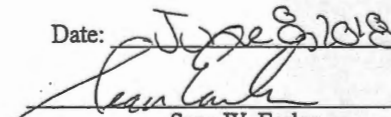
AYE NAY NP A/R*				AYE NAY NP A/R*				AYE NAY NP A/R*			
Ashmun			X	Howell	X			Prickett	X		
Avery			X	Jannarone	X			Quinn			X
Barr	X			Lloyd	X			Rohan Green			X
Chila			X	Lohbauer	X			Earlen	X		
Galletta			X	Pikolycky	X						

\*A = Abstained / R = Recused

Adopted at a meeting of the Pinelands Commission

Date:

  
 Nancy Wittenberg  
 Executive Director

  
 Sean W. Earlen  
 Chairman

May 30, 2018

**ENVIRONMENTAL PROTECTION**

**PINELANDS COMMISSION**

**Pinelands Comprehensive Management Plan**

**Pilot Program for Alternate Design Wastewater Treatment Systems**

**Proposed Amendments: N.J.A.C. 7:50-6.84, 10.22 and 10.23**

Authorized By: New Jersey Pinelands Commission, Nancy Wittenberg, Executive Director

Authority: N.J.S.A. 13:18A-6j

Calendar Reference: See Summary below for explanation of exception to calendar requirement

Proposal Number:

**A public hearing concerning this proposal will be held on:**

\_\_\_\_\_, 2018 at 7:00 P.M.  
Richard J. Sullivan Center  
15C Springfield Road  
New Lisbon, New Jersey

Submit written comments by regular mail, facsimile or e-mail by October 5, 2018 to:

Susan R. Grogan, P.P., AICP  
Chief Planner  
Pinelands Commission  
P.O. Box 359  
New Lisbon, NJ 08064  
Facsimile: (609)894-7330  
E-mail: [planning@pinelands.nj.gov](mailto:planning@pinelands.nj.gov) or through the Commission's website at  
<http://nj.gov/pinelands/home/contact/planning.shtml>

The name and mailing address of the commenter must be submitted with all public comments.

The agency proposal follows:

### Summary

The New Jersey Pinelands Commission (Commission) proposes to amend subchapters 6, Management Programs and Minimum Standards; and 10, Pilot Programs of the Pinelands Comprehensive Management Plan (CMP). The Pinelands CMP has been guiding land use and development activities in the Pinelands since it took effect on January 14, 1981. Since that time, the CMP has been amended a number of times, most recently in March 2018 through a set of amendments related to fees, escrows, application requirements and procedures, public notice and mailing requirement, water quality standards, landfill closure, signs and the Pilot Program for Alternate Design Wastewater Treatment Systems (see 50 N.J.R. 969(a)).

The amendments now being proposed by the Commission relate solely to the Pilot Program for Alternate Design Wastewater Treatment Systems. They are intended to modify the standards of this long-standing pilot program to allow for continued installation of certain wastewater treatment technologies in the Pinelands Area. A more detailed description of the pilot program and proposed amendments follows.

In 2000, the Pinelands Commission formed a special Ad Hoc Septic System Committee to research alternate septic system technologies that might better meet the water quality standards of the Comprehensive Management Plan (N.J.A.C. 7:50-6, Part VIII) for residential development on lots smaller than 3.2 acres, where such lots were already authorized pursuant to N.J.A.C. 7:50-5. In its research efforts, the Committee consulted wastewater engineering

professionals, state and regional on-site technology demonstration projects, alternate treatment system technology manufacturers, Pinelands Area county health departments and other state and local agencies. Based on this research, the Committee identified five technologies that it determined could be expected to meet Pinelands water quality standards for residential development on lots smaller than 3.2 acres in size. The identified technologies were the Amphidrome, Ashco RFS<sup>III</sup>, Cromaglass, Bioclere and FAST treatment systems. Based upon nitrogen removal expectations and the Pinelands Septic Dilution Model, the Committee concluded the Amphidrome, Cromaglass, Bioclere and FAST systems could be permitted on lots of at least one acre and that the Ashco RFS<sup>III</sup> system could be allowed on residential lots of at least 1.5 acres. All of the identified systems utilize proven biological nutrient removal processes to reduce nitrogen levels in treated wastewater. The water quality requirements of N.J.A.C. 7:50-6, Part VIII, include provisions that are aimed at controlling the amount of nitrogen that enters the environment because nitrogen itself is a significant pollutant and because it often serves as an indicator of changes in overall water quality.

The Ad Hoc Septic System Committee unanimously recommended that an interim program be developed for the approval, installation and monitoring of the five identified wastewater treatment technologies and that the interim program include conditions and safeguards to govern their use. To implement these recommendations, the Pinelands Commission adopted a set of amendments to the Comprehensive Management Plan that authorized the use of the technologies through the establishment of the Alternate Design Treatment Systems Pilot Program (see 34 N.J.R. 2804(b)). These Comprehensive Management Plan amendments, which took effect on August 5, 2002, are codified at N.J.A.C. 7:50-10, Part IV. The Pilot Program was implemented to provide a means to test whether the five identified technologies could be

maintained and operated so as to meet the water quality standards of the Comprehensive Management Plan in a manner that a homeowner can be reasonably expected to follow.

Implementation of the Pilot Program commenced on August 5, 2002, with the first pilot program treatment system installed in 2004. As of June 2017, a total of 305 pilot program systems have been installed in association with single-family residential development in 28 different Pinelands municipalities.

N.J.A.C. 7:50-10.23 of the Comprehensive Management Plan requires that the Executive Director review the Alternate Design Treatment Systems Pilot Program periodically and report the findings of that evaluation to the Pinelands Commission in a program implementation report. The criteria by which the Pilot Program is periodically evaluated are set forth at N.J.A.C. 7:50-10.23(b)1 through 6. The Executive Director issued program implementation reports in 2006, 2009 and 2012. Links to all reports may be found on the Commission's web site at [www.nj.gov/pinelands](http://www.nj.gov/pinelands). In response to the recommendations set forth in these reports, the Commission adopted amendments to the Comprehensive Management Plan to:

- Authorize the installation of Pilot Program technologies in all Pinelands municipalities;
- Provide the ability to install more than 10 of any Pilot Program technology in the same residential development;
- Grant permanent approval status to three Pilot Program technologies (Amphidrome, Bioclere and FAST) in recognition of their demonstrated ability to meet CMP water quality standards;
- Remove one technology (Ashco RFS<sup>III</sup>) from the Pilot Program due to its commercial unavailability in the Pinelands Area;

- Remove one technology (Cromaglass) from the Pilot Program due to its inability to meet CMP water quality standards;
- Provide the Executive Director with the authority to impose an immediate suspension on all new installations of a Pilot Program technology that is not adhering to the requirements of the program or meeting CMP water quality standards;
- Provide an opportunity for additional prescreened technologies to enter the Pilot Program; and
- Continue the Pilot Program by allowing installation of new systems through August 5, 2018.

The above-referenced CMP amendments took effect in 2006, 2007, 2010, 2014 and 2018 and may be found at 38 N.J.R. 1829(b), 39 N.J.R. 5077(b), 42 N.J.R. 2422(a), 46 N.J.R. 1877(a) and 50 N.J.R. 969(a).

The Executive Director completed a fourth Implementation Report in November 2017, last revised in April 2018

([http://www.nj.gov/pinelands/landuse/current/altseptic/Final%20April%2027%202018%20%202018\\_ImplementationReport.pdf](http://www.nj.gov/pinelands/landuse/current/altseptic/Final%20April%2027%202018%20%202018_ImplementationReport.pdf)). In this report, the Executive Director found that:

- The continued use of advanced on-site treatment technologies is essential to the efficient use and orderly development of the growth-oriented areas of the Pinelands Area;
- The Pilot Program provides an appropriate means to test whether technologies can be maintained and operated so as to meet CMP water quality standards in a manner that a homeowner can reasonably be expected to follow.

- The Pilot Program has been successful in identifying technologies that achieve compliance with Pinelands water quality standards when used for residential development on appropriately-sized lots.
- Landowners in the Pinelands Area benefit when new technologies are accepted into the Pilot Program, expanding choices and stabilizing prices.
- Proper operation and maintenance remains crucial to the long-term performance of the Pilot Program technologies.

Based on these findings, the Executive Director recommended that the Commission continue to monitor and evaluate the four technologies currently in the Pilot Program and issue another implementation report in November 2019. The Executive Director further recommended that two new technologies be added to the Pilot Program in 2018. Finally, the Executive Director recommended that the Commission amend the CMP to remove the current August 5, 2018 installation deadline for Pilot Program technologies.

The Commission is now proposing amendments to the CMP to revise the Pilot Program in response to the findings and recommendations set forth in the 2017 implementation report. Specifically, N.J.A.C. 7:50-10.22(a)4 and 10.23(h) are deleted in order to remove the August 5, 2018 deadline for installation of pilot program technologies. The Commission believes the installation deadline is no longer necessary, given that the Executive Director has the authority pursuant to N.J.A.C. 7:50-10.22(a)4 (previously (a)5) to immediately suspend all installations of a particular technology if monitoring data shows the system is not meeting CMP water quality standards. Likewise, the Executive Director may suspend installations if it becomes evident that a technology vendor is not complying with the terms of the Pilot Program. The Executive Director may also require an increased lot size for a particular technology if monitoring results

indicate a larger land area is necessary to meet CMP water quality standards. Because sufficient safeguards exist, a fixed installation deadline is not needed. It is worth noting that a fixed deadline has also proven over time to be difficult to administer. It often impacts development applications in progress and can only be changed upon completion of a lengthy rulemaking process.

In addition to removal of the installation deadline, N.J.A.C. 7:50-10.22(a)5 (previously (a)6) is amended to clarify the required certifications that must be provided to the Commission as a condition for use of an alternate design pilot program treatment system. This section previously required that the manufacturer of each system (or the manufacturer's agent) certify to the Commission and the county board of health that installation of each system has been properly completed. An amendment is being made to require that the certification be made by both the manufacturer and a New Jersey licensed professional engineer, and that the certification relate not only to proper installation of the system but also to its proper operation. These amended certification requirements will now be fully consistent with those already set forth in N.J.A.C. 7:50-6.84(a)5v for advanced treatment systems that have been permanently authorized for use in the Pinelands Area. To avoid confusion, the Commission believes it important that certification requirements for all systems be identical.

N.J.A.C. 7:50-6.84(a)5iv(2)(F) and (3)(F) are amended to update the cross-references in these sections to the Pilot Program requirements that will be recodified at N.J.A.C. 7:50-10.22(a)5.

As the Commission has provided a 60-day comment period for this notice of proposal, this notice is excepted from the rulemaking calendar requirement, pursuant to N.J.A.C. 1:30-3.3(a)5.

### **Social Impact**

No adverse social impact is anticipated as a consequence of the adoption of the proposed amendments. Society as a whole benefits from the protection of the Pinelands and the proposed amendments are designed to do just that. Any social impacts that do result are expected to be positive. Conversely, a negative social impact might result should the proposed amendments not be adopted. This stems from the fact that the existing rules, at N.J.A.C 7:50-10.22(a)4 and 10.23(h), prohibit the installation of pilot program treatment systems after August 5, 2018. Absent the adoption of the proposed amendments; pilot program systems could no longer be used after that date for residential development on unsewered properties of less than 3.2 acres in the Pinelands Area.

### **Economic Impact**

The economic impact of the proposed amendments to the Pilot Program for Alternate Design Wastewater Treatment systems will clearly be positive for those landowners seeking to develop their one to 3.2 acre properties in unsewered areas of the Pinelands Area. Without the proposed amendments, use of pilot program technologies would not be permitted after August 5, 2018. Landowners would then have limited options available to them; they could only use one of the three permanently-approved advanced treatment technologies. Reduced choices could drive up the prices of these three approved technologies. Non-adoption of the amendments would also create a problem for landowners and homebuilders with applications in progress if they were unable to install their proposed pilot program systems prior to August 5, 2018.

### **Environmental Impact**

Elimination of the installation deadline associated with the Alternate Design Wastewater Treatment Systems Pilot Program is expected to provide environmental benefit. Elimination of

the deadline provides a continued opportunity for installation of new systems, which carries with it the opportunity for the Commission to collect data and monitor existing pilot program technologies and authorize new prescreened advanced wastewater treatment systems to enter the program and be installed and monitored. The installation of additional systems will result in more monitoring and testing of effluent, and this will ultimately provide the Commission with more data to be evaluated as part of the pilot program. Provided they are maintained properly, these systems provide the potential for improved water quality when compared with conventional septic systems.

### **Federal Standards Statement**

Section 502 of the National Parks and Recreation Act of 1978 (16 U.S.C. §471i) called upon the State of New Jersey to develop a comprehensive management plan for the Pinelands National Reserve. The original plan adopted in 1980 was subject to the approval of the United States Secretary of the Interior, as are all amendments to the plan.

The Federal Pinelands legislation sets forth rigorous goals that the plan must meet, including the protection, preservation and enhancement of the land and water resources of the Pinelands. The proposed amendments are designed to meet those goals by allowing for the continued installation and monitoring of alternate design wastewater treatment systems for residential development through a highly successful pilot program.

There are no other Federal requirements that apply to the subject matter of these amendments.

### **Jobs Impact**

Elimination of the impending deadline in the pilot program provides a continued opportunity for new home construction in areas that are zoned for such use but are not served by

public sewerage infrastructure. The proposed amendments may therefore result in the creation of jobs associated with new home construction. Conversely, non-adoption of the proposed amendments could have a negative impact on job creation by limiting the options of a small number of residential homebuilders in the unsewered portions of the Pinelands Area.

### **Agriculture Industry Impact**

The proposed amendments are not expected to impact the agriculture industry in the Pinelands.

### **Regulatory Flexibility Analysis**

The proposed amendments allow for installation of certain wastewater treatment technologies for residential development in the Pinelands Area beyond the August 5, 2018 deadline currently specified in the CMP. They also clarify certification requirements involving such technologies for purposes of ensuring consistency throughout the CMP. All of the other reporting, recordkeeping and compliance requirements of the Pilot Program continue to apply to the manufacturers of alternate design wastewater treatment systems authorized for use in the Pinelands Area. It is believed that at least some of these manufacturers may be small businesses, as defined under the Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. In meeting the standards for use of the authorized technologies that would continue to be authorized under the Pilot Program, these businesses may continue to incur costs relative to ensuring compliance with the maintenance and monitoring requirements of N.J.A.C. 7:50-10.22(a)5 (previously (a)6). It is unlikely, however, that engaging professional services will be necessary in order to do so. The design of systems for approval by County health departments and other agencies requires the services of a professional engineer under existing State law; that requirement is not changed by the proposed amendments. Furthermore, the requirements at N.J.A.C. 7:50-10.22(a)6 merely

involve the provision of certain manuals, maintenance guarantees and other documents that the manufacturers already have on hand, as well as the provision of resources for the collection and analysis of effluent sampling. This is not to say that the requirements represent insignificant costs for the manufacturers, particularly for the five-year non-cancellable maintenance contract required by N.J.A.C. 7:50-10.22(a)6vii. However, these requirements are a critical part of the proposed pilot program and the Commission would not be able to extend or expand the program without them. In any case, it is likely that the associated costs will be passed on to the homeowner by the manufacturers. These costs represent a relatively small price to pay for the opportunity to develop lots that would otherwise not be developable.

No differing requirements have been established for small businesses under the pilot program. Instead, the same maintenance and monitoring requirements will continue to be imposed relative to the authorized technologies, regardless of business size. This is necessary to balance protection of Pinelands resources with the Commission's desire to provide a continued opportunity for residential development on lots that are less than 3.2 acres in size in unsewered areas of the Pinelands. In fact, the Commission has identified proper system maintenance as the primary factor in ensuring that the alternate technologies will function in a manner that is consistent with CMP water quality standards. It is therefore critical that the requirements continue to be imposed on all of the manufacturers or their agents.

The proposed amendments impose no other reporting, recordkeeping or compliance requirements on small businesses, as defined under the Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq.

### **Housing Affordability Impact Analysis**

The proposed amendments have the potential to reduce the cost of alternate design treatment systems for those landowners seeking to develop homes on lots between one and 3.2 acres in size in the unsewered portions of the Pinelands Area. With the removal of the installation deadline for such systems, current and future technologies participating in the Pilot Program may continue to be used. A range of options for landowners is thereby preserved, perhaps leading to increased competition among the vendors of existing and new pilot program technologies, resulting in decreased costs of the systems for homeowners.

While the proposed amendments may result in a decrease in the costs of alternate design treatment systems, and therefore a decrease in the average cost of housing utilizing such systems, it is important to note that these systems are being installed in the unsewered portions of the Pinelands Area and primarily in the Regional Growth Areas, Pinelands Villages and Pinelands Towns. Permitted densities in the unsewered portions of these management areas are relatively low, ranging from one unit per acre to one unit per 3.2 acres. Housing units in those portions of the Pinelands Area within which most affordable housing is targeted or anticipated would not be affected as such units are typically expected to be served by public sanitary sewer.

### **Smart Growth Development Impact Analysis**

The proposed amendments allow for the continued installation and monitoring of alternate design treatment systems for residential development in the Pinelands Area through the Commission's Pilot Program. These systems are used by landowners in the unsewered portions of the Pinelands Area that are zoned for residential development on lots of less than 3.2 acres in size. These areas are primarily located in Regional Growth Areas, Pinelands Villages and Pinelands Towns, management areas designated for development by the CMP, equivalent to designated centers under the State

Development and Redevelopment Plan. The proposed amendments do not increase the amount of permitted residential development in these management areas; rather, they provide a continued opportunity for the development of housing in accordance with municipal zoning plans that were previously approved by the Commission. Thus, the proposed amendments are not expected to result in any changes in housing production within designated centers or in any other portions of the Pinelands Area. There will be no effect on new construction in Planning Areas 1 and 2 as designated by the State Development and Redevelopment Plan as these State Planning Areas do not exist in the Pinelands Area.

Full text of the proposal follows (additions indicated with underlines thus; deletions indicated in brackets [thus]):

7:50-6.84 Minimum standards for point and non-point source discharge

(a) The following point and non-point sources may be permitted in the Pinelands:

1.-4. (No change.)

5. Individual on-site septic waste water treatment systems that are intended to reduce the level of nitrate/nitrogen in the waste water, provided that the following standards are met:

i.-iii. (No change.)

iv. The design of the system and its discharge point, and the size of the entire contiguous parcel on which the system or systems is located, will ensure that ground water exiting from the entire contiguous parcel or entering a surface body of water will not exceed two parts per million nitrate/nitrogen calculated pursuant to the Pinelands dilution model dated December, 1993, as amended, (Appendix A) subject to the provisions of

(a)5v below and based on the following assumptions and requirements.

For purposes of this section, the entire contiguous parcel may include any contiguous lands to be dedicated as open space as part of the proposed development but may not include previously dedicated road rights-of-way or any contiguous lands that have been deed restricted pursuant to N.J.A.C. 7:50-5.30 or 5.47:

(1) (No change.)

(2) For Amphidrome, Bioclere and FAST systems:

(A)-(E)(No change.)

(F) The manufacturer or its agent shall provide to each owner an operation and maintenance manual and shall provide a five-year warranty consistent with the requirements of N.J.A.C. 7:50-[10.22(a)6viii]10.22(a)5viii;

(G)-(J) (No change.)

(3) Other on-site septic waste water treatment systems shall only be credited with reducing total nitrogen concentration to the extent authorized by an experimental monitoring program approved by the Pinelands Commission. Such an experimental monitoring program shall only be approved if:

(A)-(E) (No change.)

(F) The system meets all the requirements in N.J.A.C. 7:50-[10.22(a)6i]10.22(a)5i through x; and

(G) (No change.)

**SUBCHAPTER 10 PILOT PROGRAMS****PART IV – ALTERNATE DESIGN TREATMENT SYSTEMS PILOT PROGRAMS****7:50-10.22 General standards**

(a) Alternate design pilot program treatment systems shall be authorized for residential use in all municipalities provided that the following standards are met:

1.-3. (No change.)

[4. The USEPA ETV or NSF/ANSI Standard 245 technologies approved by the Commission for participation in the pilot program pursuant to N.J.A.C. 7:50-10.23(b) are authorized to be installed until August 5, 2018.]

[5]4. The Executive Director shall submit an annual report to the Commission describing installation, maintenance and performance data for each technology. The Executive Director also shall submit an interim report to the Commission if it is determined there is a significant installation, maintenance or performance issue with one or more technologies that needs to be addressed before the issuance of the next annual report. Copies of each annual and interim report shall be provided to each manufacturer and agent of a technology that is discussed in that report. If it is determined in a report either that a manufacturer or its agent is not adhering to any of the requirements of this pilot program or that any one of the technologies, based on maintenance or installation issues or on an evaluation of all the monitoring results for that technology under this pilot program, is not meeting the minimum water quality standards in N.J.A.C. 7:50-6.83 or the two parts per million total nitrogen requirement in [(a)6x] (a)5x below on all lots

smaller than 3.2 acres or on lots smaller than a particular size because the effluent exiting the system is higher than was anticipated in establishing the lot sizes in

(a)3 above:

i.-ii. (No change.)

[6]5. Conditions for the use of alternate design pilot program treatment systems are as follows:

i.-iv. (No change.)

v. The manufacturer or its agent and a New Jersey licensed professional engineer shall certify to the Commission and the local board of health that installation of each system has been properly completed and that the system and all of its components are operating properly. The manufacturer or its agent [and] shall include in the certification the cost of the installation and a description of any problem encountered during the installation;

vi.-xi (No change.)

**7:50-10.23 Pinelands Commission approval and evaluation**

(a)-(g) (No change.)

[(h) Nothing in this section shall be construed to authorize the installation of any USEPA ETV and NSF/ANSI Standard 245 treatment technology approved by the Commission for participation in the pilot program after August 5, 2018 as set forth in N.J.A.C. 7:50-10.22(a)4, unless a rule has been adopted by the Commission which expressly authorizes such installation pursuant to (f) or (g) above.]



## LITTLE EGG HARBOR TOWNSHIP

665 RADIO ROAD, LITTLE EGG HARBOR, NJ 08087

(609) 296-7241  
Fax (609) 296-5352  
<http://www.leht.com>

April 24, 2018

New Jersey Department of Environmental Resources, Natural & Historic Resources

PO Box 420

Trenton, NJ 08625-0420

Attn: Acting Commissioner Catherine R. McCabe

**Re: Bass River Fire Tower**

COPY

Dear Commissioner McCabe:

About a year ago we wrote to express our support for the NJ State Forest Fire Service in an effort to remove some non native white pine trees that had been planted near the Bass River Fire Tower in the 1930's by the former U. S. Civilian Conservation Corps (CCC). Those trees had, at that point, grown to such a height that overshadowed that tower and greatly reduced its utility for its intended purpose, which is the early detection of pinelands fires to aid the prompt dispatch and response of emergency fire equipment to suppress these fires before they become overwhelming disasters as they will if undetected and unchecked. It is now our understanding that this issue still remains in doubt and we wanted, once again, to express our support for the Service in these regards.

These blazes, either intentional or accidental, have occurred in this area for hundreds of years and, once ignited, they are, in some cases, known to grown quickly to an enormous size that quickly devours the forest resource and then proceed to threaten the surrounding homes and businesses in many communities. On many occasions these fires have overwhelmed all fire fighting resources and a number of fire fighters have been lost, as well as a number of other persons trying in vain to flee these conflagrations. It seems, in fact, ironic that many CCC personnel were themselves lost in such incidents and that their later planting of these non-native trees was done to partially repair the damage from those fires. How sad it is that the product of their labor has now grown to such an extent to threaten the lives of present day forest firefighters, such as the four volunteers lost there in 1977. In that tragic case the fire was detected too late to be contained without extreme risk by those fire fighters. This remains an abiding memory and has remained a scar on the lives of many families here since.

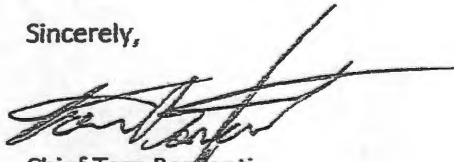
There was a recent event that we believe makes this case that perhaps anything else we could say. On April 22, 2018 a major forest wildfire broke out in Washington Township, Burlington County. At the point of its ignition it would have been about nine miles from the Bass River Tower. Although Bass River

was one of the closest towers, it was actually the last in the area to observe the blaze with towers as far away as Medford (at 17 miles, twice as far) being able to observe it first. We believe this delayed the response to this fire which, once again, grew to destroy some 843 acres of forest land and also would have consumed homes, but for the actions of the brave men and women of the NJ Forest Fire Service and local volunteers.

This tower has served, for decades, as a sentinel that protects our communities from the ever present dangers of wildfires here. We are always thusly at risk, simply because of the inherently volatile nature of local forests, as opposed to less risky conditions found elsewhere. National media outlets, such as Rolling Stone Magazine, have, in fact, noted this phenomenon and, we believe, correctly stated the incredible danger that Pinelands communities face in part due to inadequate mitigation activities. We have, in Little Egg Harbor, maximized our mitigation activities and will continue to do so. No amount of mitigation, however, can replace the benefit of early detection and efficient fire fighting when the inevitable occurs.

Make no mistake, we greatly appreciate the story of the CCC's and their abiding legacies in our forests. Their story has become an inexorable part of local lore and your interest in the preservation of those legends is laudable. We ask you to keep in mind, however, that this tower is an essential piece of the wildfire detection infrastructure that was designed and placed as such decades ago. It is our understanding that all alternatives have been explored and all have been found wanting. The Service, in addition, has pared the proposed cut down to the lowest possible area of impact. Sometimes, as we believe is this case here, it is necessary to eliminate a very small part of something great for the greater good. Because these forests are an integral part of our communities we believe that inadequate monitoring will present a clear and present danger to the businesses, homes and, ultimately, the people who work and live here. We ask you to approve the revised proposal of the NJ Forest Fire Service for these reasons immediately. Thank you, once again, for this opportunity to express our opinion in these regards.

Sincerely,



Chief Tom Bonifanti

Mystic Island Fire Company



Chief Anthony D'Andrea

West Tuckerton Fire Company

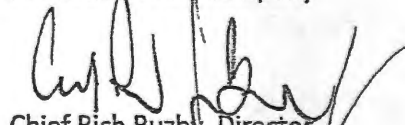
Cc: Honorable Governor Phil Murphy

Little Egg Harbor Township Committee

Chief Frank Runza



Parkertown Fire Company



Chief Rich Buzby, Director

Little Egg Harbor Township O.E.M.

NJ 9<sup>th</sup> Legislative District

NJ Forest Fire Service



## New Jersey Fire Safety Council

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5 Wildwood Way  
Freehold, NJ 07728  
P: 732.890.0725  
E: [Bill@wildfiresafetycouncil.org](mailto:Bill@wildfiresafetycouncil.org)  
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June 7, 2018

### Board of Trustees

Bill Brash, *President*

John Cowie, *Trustee*

Maris Gabliks, *Trustee*

Pinelands Commission  
P.O. Box 359  
New Lisbon, NJ 08064

Re: Comments to the proposed Public Development  
Application No. 1990-0868.029  
Tree removal to improve visibility from Bass River State  
Forest fire tower

NJ Pinelands Commission,

Please note the comments below pertaining to the proposed *Development Application No. 1990-0868.029*, tree removal to improve visibility from Bass River State Forest fire tower.

The New Jersey Fire Safety Council a statewide non-profit organization dedicated to reducing the risk of wildfire to NJ residents and increasing community resiliency, supports the harvesting of all trees needed to remove the obstruction from the Bass River State Park fire tower for the following reasons:

- The obvious health and safety advantages provided by an unobstructed fire observer seated in the Bass River State Park fire tower.
- The wildfire history of the region is tragic and includes 7 fatalities due to wildfire. Three line of duty deaths in the 1937 fire and four line of duty deaths in the 1977 fire.
- The White pines in question are non-native. The White pines planted by the CCC in the 1930's were all completed with the understanding that these trees would be harvested one day. In a terrible irony, the three 1937 line of duty deaths may have been workers who had planted these very trees. Would they have ever condoned future efforts to increase someone else's risk of dying by wildfire?
- Early detection is the key to effective response and this is especially crucial in the Pinelands with a known fire history, increased fuel hazard and fire risk. The obstruction of the Bass River State Park fire tower by these White pines increases the detection time, fire risk to the residents and the NJ Forest Fire Service's response time.
- Fire towers in NJ serve other vital functions in addition to wildfire detection. During a wildfire incident, tower observers act as a communication hub between fire fighters on the ground and command. They help to coordinate resources and can relay crucial information to firefighters on the ground about fire behavior and wind shifts from observing the smoke columns. Failure to remove these trees will increase the risk to residents and reduce firefighter safety.

In summary the NJ Fire Safety Council fully supports the removal of the planted non-native white pine from obstructing the view of the Bass River State Park fire tower in any way.

Should you have any questions or require any additional information do not hesitate to contact me.

Sincerely,

*William F. Brash Jr.*

William F. Brash Jr.  
President

# Bass River State Forest Management Plan Objectives

## MANAGEMENT POLICY:

### Objectives:

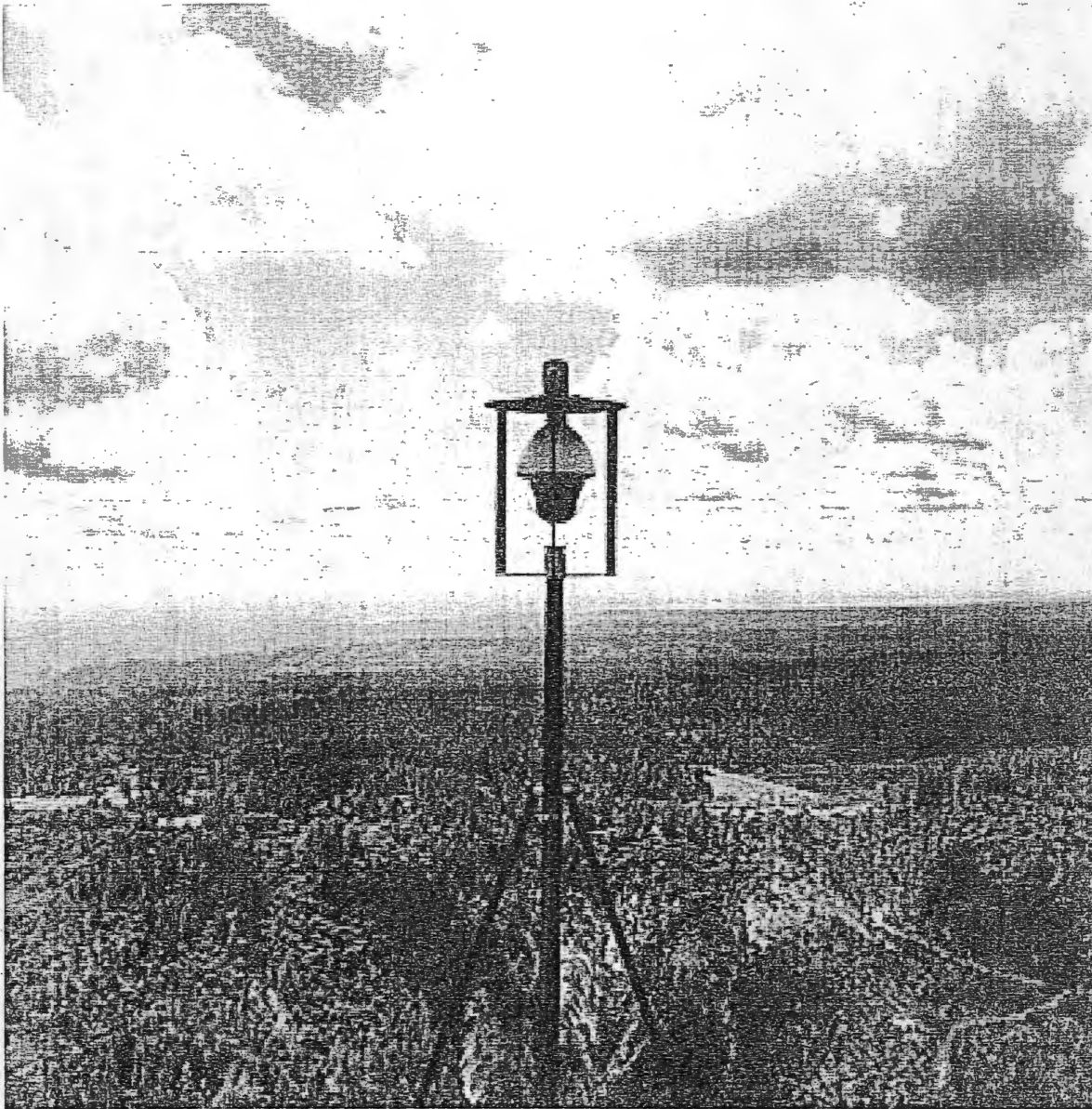
- 1-To acquire an area of sufficient size to permit of efficient administration.
- 2-To replace present scrubby, inferior tree growth with thrifty stands of the best species capable of producing the best and largest timber crops in the shortest time.
- 3-Eventually to produce a sustained annual yield of forest products for local consumption and to supply the local wood industries.
- 4-By the sale of forest products, the removal of which benefits the forest silviculturally, to raise as much State income as is possible, to the end that the forest may become self supporting and eventually show a net profit.
- 5-To increase and develop the recreational use of the forest by the public.
- 6-To discover a system of silvicultural management, which, supplemented by a reasonably efficient fire protection organization, will result in adequate protection at a justifiable cost.
- 7-In all lines of work to conduct studies and investigations to determine the best methods to use, costs, and results, and to demonstrate them to the public as a guide for the practice of private forestry.

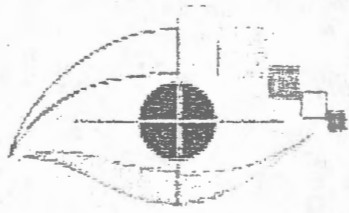
From:  
"A Forest Management Plan for  
the Bass River State Forest New  
Gretna, NJ. Willis M. Baker,  
1927."

Silvicultural policy demands cutting and reforestation of all rundown timber areas as rapidly as possible and the accomplishment of sustained yield. ~~This policy necessitates the cutting and salvaging of all inferior, damaged and silviculturally mature timber as rapidly as possible and then reforesting by planting where natural reproduction can not be depended upon. On most of the area this work will have to be done without the realization of income. It is thought that most of the area will require planting.~~



**EVS**  
EnviroVision Solutions





**EVS**

EnviroVision Solutions

## The ForestWatch® System

*Protecting People*

*Defending Property*

*Preserving Resources*

**Vital early detection and rapid, informed decision-making is saving lives, property and resources when fires flare up.**

The ForestWatch® Wildfire Detection and Monitoring System – developed by South Africa-based technology firm EnviroVision Solutions – is one of the most advanced wildfire detection systems in the world.

Combining high-definition imaging systems with purpose-built image processing software, ForestWatch uses mathematical and image processing algorithms to optically scan wide areas and detect the earliest telltale signs of smoke. This signature is used to alert an operation at a control center monitoring many imaging systems and thousands of square miles of property, and draw their attention to where a problem may be developing. The operator can use a range of tools including the powerful zoom lens capability of the camera, and image processing tools that make smoke vastly more visible than to the naked eye, to determine if the apparent smoke is actionable or not. If so, the smoke column can be located and referenced to available Geographic information to identify the appropriate responding agency, landowner, and other information, and resources dispatched accurately.

The award-winning ForestWatch® Wildfire Detection and Monitoring System is a powerful decision support tool and early warning system that has been used with great success by governments and forestry industries around the world since 2003 – protecting your greatest assets in a cost-effective and resource-conscious manner.

## Why Computer Augmented Detection?

The use of advanced vision systems such as cameras, computers and software to automatically detect forest fires has generated some debate among forest managers. We recognize traditional detection methods – such as human lookouts and aerial surveillance – have been used effectively for many years.

EVS wants to emphasize making the switch to automated detection through ForestWatch(r) produces some definite benefits beginning with faster response time, cost savings and greater coverage. Those benefits just scratch the surface of all of the tools ForestWatch(r) brings to the firefighting industry.

Significant reduction in time  
between fire ignition,  
discovery and dispatch:



Minutes matter when you're dealing with a fire. Automated detection systems alert vision system operators to an event from the outset and provide them with tools to monitor progression and coordinate a response at the click of a mouse.

Greatly increase situational  
awareness while reducing  
staff costs:



Nighttime detection for 24/7  
protection:



Real-time visual and weather data:



Multiple uses for year-round operational efficiency:



## Learn more about ForestWatch®

- [Why ForestWatch® is your best choice in an automatic fire detection system.](#)
- [A step-by-step explanation of how ForestWatch® works.](#)
- Where ForestWatch® and other EVS smart sensory systems are [currently in operation.](#)
- [ForestWatch® success stories:](#) Media articles and our clients speaking for themselves.

Alternatively, you can [contact EnviroVision Solutions](#) for more information.

# ForestWatch®

## Wildland Fire Detection and Monitoring System

***A key component in successfully preventing widespread destruction from wildland fires is early detection.***

EnviroVision Solutions (EVS) offers the ForestWatch® wildland fire detection system which uses advanced video analytics and precision cameras to detect the first indications of smoke from a wildland fire.

Fire agencies, in years past, constructed fire lookout towers staffed by trained personnel who were relied upon to alert firefighters of new blazes. In the early 1900's, when the first towers were erected, communication was accomplished via carrier pigeon and Morse code using heliography; the Osborne Fire Finder was developed to plot the location of the fire.

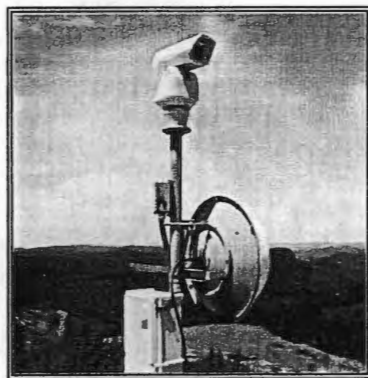
Radios, cellphones, Global Positioning Systems, and computers have helped advance the art and science of fire detection and firefighting methods to a cost effective, highly efficient system, but the initial detection of a wildfire is still largely dependent on the human eye detecting signs of fire.

The ForestWatch® software leverages modern technologies to alert watchers to the potential presence of a fire, to precisely map the location, and provide images, with an accurate latitude and longitude, to dispatch centers and responders. Fire agencies can use this information to quickly and accurately determine the risk and confidently deploy an appropriate initial attack. EVS has installed this system on more than 250 Lookouts, cell towers, and other structures globally, and has over a decade of operational experience.

### ***Camera Capabilities***

EVS' cameras are installed singly or in pairs to monitor a full 360° panorama from a view point. In normal operation the camera is constantly scanning, under computer direction, continually on watch for signs of smoke. A detection operator,

monitoring several cameras, can take manual control of any camera with a mouse click, zoom to target and utilize the high magnification lens and high resolution imagery to identify and validate the source of a suspected smoke. Near-infrared capabilities allow the cameras to see through smoke, to the flaming front of the fire, providing fire managers with real time situational awareness.



### ***Computer Detection***

The ForestWatch® software running at each camera location controls the camera, performs image stabilization, enhancement, and compression to reduce the communication bandwidth by 40:1 or more while delivering high quality images back to a central monitoring location.

The Detector component of the ForestWatch® software utilizes these high quality images and EVS' proprietary algorithms to provide early detection of smoke while discriminating between smoke and dust clouds, fog, flocks of birds, and other false positives. When an alert is generated by the ForestWatch® software it draws a bounding box on the image displayed on the operator workstation. The operator can inspect the area of interest using the powerful camera features and vision enhancements built into the system to investigate far more quickly and effectively than traditional methods would allow.

Once a potential fire has been verified the system can be used to alert responsible parties via email, SMS, or telephone, and the images may be viewed from any internet browser using the ForestWatch Online web presence.

### ***Custom Map Display***

As part of the ForestWatch® installation a Geographic Information System(GIS) component is loaded which includes topographic data allowing the cameras to be fully georeferenced. This means a fire's coordinates can be determined from a single camera without triangulation. Known facilities and activities which may cause false alarms can be identified and masked. The GIS map display can import standard ESRI shapefiles, allowing easy integration of locally relevant data. Names of specific landmarks and structures can be added to aid locational awareness and assist in guiding responders. As the operator moves the cursor across the image the Latitude and Longitude are continuously displayed. An operator can produce images of the fire and it's location and make them available to fire personnel outside the monitoring center. Burn permits, lightning data, weather station data, and automated vehicle location data may also be displayed on the camera images or on the GIS display.

### ***Eyes in the Dark***

Many wildfires start at night when detection is more difficult and the risk of resources being dispatched to a wrong location are higher due to darkness. The nighttime detection mode of ForestWatch® allows 24 hour detection, and the georeferenced imagery leaves no doubt about the

location of a fire. A daytime view of the area of interest can be overlaid on the night view to provide the operator with visual context. The ForestWatch® software can be trained to ignore the usual lights at night in an area which allows precise detection of brighter than normal or unusually located light sources, even in urban interface areas with numerous lights and roadways.

### **Image Access**

Unlike staffed lookout towers, all EVS camera images can be viewed on any device anywhere with Internet access and a web browser, including smart phones and tablets. This gives fire managers and firefighters unparalleled access to near real-time images, providing fire intelligence and situational awareness.

ForestWatch® provides Fire Managers with the ability to monitor emerging and ongoing incidents, to maximize the effectiveness of available resources and to identify if there is a need to order additional resources. Increased situational awareness at the command center enhances firefighter safety. ForestWatch® systems allow a fire agency to more effectively utilize personnel and resources.

### **Forensics**

The ForestWatch® system archives image and telemetry data from all cameras continually. This information can be used in fire investigations and in the prosecution of arsonists. The date and time stamped on each image provides solid evidence of what happened when. The system has also been effective in the prosecution of poaching, vandalism, timber theft, and has assisted in Search and Rescue operations. The continuous tracking of a fire's full lifecycle also helps with the After Action Review to help hone skills and evaluate the effectiveness of specific actions.

### **Cost Effectiveness**

Utilizing the ForestWatch® system a single operator working from a secure central location can monitor many remote Protection Zones, surveying thousands of square miles with computer enhanced vision and awareness. A smoke event can be detected, located precisely, and evaluated by this operator within minutes of ignition. If an alarm is raised the dispatch center gets not only the location

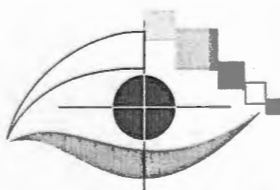
and description of the fire but that actual image that raised the alert, as well as historic images. They have the full GIS map display at their fingertips, and the ability to track the development of the fire visually minute by minute.

The cost of the ForestWatch software and infrastructure to support a remote camera system represents a small fraction of the cost that would be required to support a staffed lookout. The system can also augment currently staffed towers by offering after hours coverage, powerful camera optics, georeferencing, and a high speed digital communication channel available to the tower lookouts. Low power consumption and environmental hardening allow for remote, off-grid installations.



### **Field Tested**

Douglas Forest Protective Association (DFPA) has been using the ForestWatch Wildfire Detection and Monitoring System across Southwestern Oregon since 2006. At their dispatch center in Roseburg, Oregon, operators at four workstations monitor 30 cameras overlooking thousands of square miles of commercial timber, public, and recreational lands. The system currently serves several agencies including the Oregon Department of Forestry, The Bureau of Land management, and the United States Forest Service. Other large deployments in Canada and California attest to the systems effectiveness.



# **EVS**

EnviroVision Solutions

For more information on ForestWatch®

please contact us:

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Or visit our website at:

<http://www.EVSolutions.biz>