

PINELANDS CLIMATE COMMITTEE MEETING

This meeting was conducted remotely
All participants were present via Zoom conference
The public could view/comment through Pinelands Commission YouTube link:
<https://www.youtube.com/c/PinelandsCommission>

Meeting ID: 899 8121 1447

February 14, 2024

MINUTES

MEMBERS IN ATTENDANCE: Chairman Mark Lohbauer, Commission Chair Laura E. Matos, Jerome H. Irick, Mark Mauriello, and Jessica Rittler Sanchez

MEMBERS ABSENT: Theresa Lettman, Jonathan Meade

STAFF PRESENT: Susan R. Grogan, Stacey P. Roth, Brad Lanute, Steven Simone, John Bunnell, Branwen Ellis, Paul Leakan, and Dawn Holgersen. Also present was Alexis Franklin, with the Governor's Authorities Unit.

1. Call to Order

Chairman Lohbauer called the Pinelands Climate Committee meeting to order at 9.31 a.m.

2. Adoption of minutes from the September 30, 2023 Pinelands Climate Committee meeting

Commissioner Rittler Sanchez moved the adoption of the minutes of the September 30, 2023 Committee meeting. Commission Chair Matos seconded the motion. Commissioner Rittler Sanchez abstained. All others voted in favor.

3. Update on state and legislative initiatives

Ms. Grogan said Commission staff continue to work with the New Jersey Board of Public Utilities (NJBPU) on the straw proposal for dual-use solar and other solar programs.

She said a recommendation was made at the last Commission meeting to execute a Memorandum of Agreement (MOA) to deviate from the solar siting rules in the CMP as a pilot program for dual-use solar. She said an update should be available at the April Committee meeting.

Chairman Lohbauer remarked on the narrow window of opportunity for NJBPU to identify dual use solar projects and approve them. He said any effort that can be made in support of those projects would take some time. He said he appreciated the efforts to expedite the process.

Commissioner Mauriello said he is conscious of the processes involved in rulemaking. He suggested an effort be made to introduce rules concurrent with rulemaking from other agencies such as NJBPU.

Chairman Lohbauer said that the Committee's interest in the dual-use solar program focuses on the production of sustainable energy. He said that dual-use solar is unique because it complements some farming. He said that in review from a previous presentation on the dual-use solar program it was identified that some crops produced more in a dual-use setting. He said that blueberry crops specifically performed better in other states and hoped that the same outcome could be seen in New Jersey. He said a pilot program for dual-use solar would be beneficial to see if a similar outcome could be possible for cranberry farming.

Commissioner Irick expressed his appreciation for Chairman Lohbauer's remarks on the dual-use solar program. He said that it is an important topic in Atlantic County. He suggested that select blueberry farms should be granted a waiver during a pilot program as a trial to see the potential benefits.

Chairman Lohbauer recused himself from the discussion of Senate Bill 2424, as he participated in the State task force for forestry issues that assisted with the development of S2424. He sat in the audience during the discussion.

Ms. Roth said Senate Bill 2424 (S2424) is the product of the State task force for forestry in 2022. She said it is similar to a previously introduced forestry bill. She said the bill would establish programs within the New Jersey Department of Environmental Protection (NJDEP) for the management of forested lands that are publicly held by state and local government.

She said one of the requirements of the bill would be for NJDEP to undergo a surveying, mapping, and planning process. She said that process would result in the generation of a GIS mapping layer to provide details such as the location and composition of the publicly owned forested land. She said there would be an inventory of resources and identification of areas with cultural or spiritual significance for indigenous peoples. She said identification would be made for lands suitable to be included in natural heritage designations.

She said a newer addition to S2424 is the identification of areas subject to afforestation or possible for reforestation in order to achieve greenhouse gas reduction. She said another measure in the bill would be to identify areas suitable to function as a carbon reserve. She said without further definition in the statute, it would seem that most of the Pinelands could be considered a carbon reserve. She said another measure would be to identify active areas to promote carbon sequestration, maintain biodiversity, and address current and future threats to the forested area.

She said NJDEP would be required to hold a minimum of three public meetings in each of the regions of the state. She said posting will be required on the NJDEP website, with a 90-day public comment period. She said the purpose would be to take into account the different composition of forests throughout the state.

Ms. Roth said the outcome would be to have management plans for the publicly owned forested lands. She said the planning effort will be conducted, at a minimum, every 10 years. She said the bill also calls for the establishment of an advisory board, or use of the existing forest health advisory council that was formed in 2007 to assist in implementation of the plan.

She said NJDEP would be required to promulgate interim rules within one year of the effective date of the bill. She said the interim rules will address the requirements for forest plans. She said

the interim rules would identify the minimum size threshold for forested lands to be subject to the requirements. The bill would establish a minimum size of 10 acres but gives NJDEP the authority to identify how large the forest area must be.

Ms. Roth also said the bill would prevent forestry activities solely for commercial profit. She said that forest management plans would not be approved until rules are in place. She said exceptions could be made in case of emergency.

She said that if interim rules are not adopted within one year, the authority would expire. She said that permanent rules must be adopted within three years of the adoption date of the bill.

Ms. Roth said the bill also includes requirements for a deer study to promote the reduction of the deer population, as it seems to have become invasive.

She said the bill would also provide amendments to the Natural Area System Act. She said it would allow NJDEP to add additional acreage to the Natural Area System after surveying. She said the bill also includes amendments to the Prescribed Burn Act. The bill would require the amendments to be implemented within 18 months of the adoption of the bill.

Ms. Roth said the appropriation for S2424 is \$60 million, all of which would go to NJDEP. She said \$50 million would be provided through the corporate business tax and \$10 million would be provided through the Green Acres Bond Act.

Ms. Roth said the bill is currently in Committee and that it was sponsored by Senator Smith. She said it was originally introduced in December and re-introduced during the current legislative session.

In response to Commissioner Rittler Sanchez's question about the maintenance of carbon reserve forests, Ms. Roth said the bill states that it would allow natural processes with little to no habitat manipulation. She said more information would be available when NJDEP promulgates rules. She also said the bill does not clearly define what would be considered a carbon reserve forest.

In response to Commissioner Rittler Sanchez's question on application requirements for NJDEP to conduct clearing and prescribed burns, Ms. Grogan said that no application to the Commission would be required for a prescribed burn, but one would be required for clearing activities.

Ms. Roth clarified that the bill would not change the Commission's rules regarding forestry activities.

In response to Commissioner Irick's question as to the effect of the bill on conserved lands such as Green Acres, Ms. Roth said the bill would be for forested lands in state or local government ownership.

Ms. Roth stated the Commission will prepare comments on the bill and submit them when appropriate.

4. Update on office initiatives

Ms. Grogan said the Commission issued a request for quotes to replace the lighting in portions of the Richard J. Sullivan Center. She said there are some issues with the current lighting, and that presents an opportunity to upgrade to energy efficient lighting.

In response to Chairman Lohbauer's question regarding NJBPU grants for electric vehicle charging stations, Ms. Grogan said discussions were held with NJDEP staff and new opportunities may be available for NJBPU funding in the spring.

5. Pinelands management area boundary assessment

Steven Simone, Commission Planning Specialist, delivered a presentation on the Pinelands management area boundary assessment (*attached to these minutes and available on the Commission website at:*

<https://www.nj.gov/pinelands/home/presentations/PMA%20Boundaries%20Recommendations%2020230214%20FINAL.pdf>).

Mr. Simone said the assessment focused on three management areas: Regional Growth Areas (RGA), Pinelands Towns, and Pinelands Villages. He said those areas are where growth is encouraged or permitted by the Pinelands CMP.

He said the five factors in the first analysis included wildfire hazard, flood hazard, sea level rise, threatened & endangered species (T&E) habitat, and Pinelands acquisition targets. He said those criteria were used to identify areas needing further consideration. He said the first analysis identified 2,000 areas.

He said the second analysis considered the size of the area, urban land use/land cover, preservation status, proportion of area in wetlands, Pinelands development application status, proximity to preserved lands and/or other management areas. He said a minimum size of 10 acres was established to further focus the analysis. He said that the analysis identified 39 areas for consideration. He said the areas had a cumulative size of about 1,500 acres, ranging in size from 10 acres to 169 acres, with an average of 38 acres. He said the areas spanned across 12 municipalities in all three management areas studied. He said the areas identified only account for one percent of the overall area of the three management areas combined.

He said the third analysis looked at the ownership of the parcels, zoning standards, lot configurations, agricultural use/land cover, vacancy or development potential, and regional context. He said the third analysis identified areas with multiple climate risks. He said the area delineations are irregular as a result of overlapping risk factors. He said some adjacent lands may also be at risk but scored slightly lower. He also said multiple areas are grouped and should be considered in a broader context.

He said that 15 of the 39 areas have existing protections and possess no potential for future development. He said no action would be needed in those areas.

Mr. Simone said the remaining 24 areas are grouped based on relation to other areas of concern and location. He said the areas in New Gretna Village, Sweetwater & Lower Bank Villages, Port

Elizabeth-Bricksboro Village, Hamilton Township RGA, and Pemberton Township RGA. He said the approach resulted in specific recommendations for each of the five areas.

He said in the New Gretna Village of Bass River Township, the periphery of the village is most at risk for the effects of climate change. He said there is a moderate risk of wildfire. He said sea level rise poses the greatest threat. He said the recommended course of action is to establish a mandatory 300-foot buffer to wetlands in select areas.

Mr. Simone said the Sweetwater Village of Mullica Township & the Lower Bank Village in Washington Township have the greatest risk of effects from climate change in the riverine and wetlands areas. He said the risk of wildfire is moderate to high and the flooding risk is high. He said some upland areas would be susceptible to flooding. He said the recommended course of action is to establish a mandatory 300-foot buffer to wetlands and additional uplands buffers in select areas.

He said the Port Elizabeth-Bricksboro Village in Maurice River Township faces risks to both upland and wetland areas. He said the wildfire risk is moderate and the flooding risk is high. He said a portion of the village has been previously targeted for preservation. He said the recommended course of action would be to expand the acquisition target area and implement a density transfer program within the village.

In response to Commissioner Rittler Sanchez's question regarding the flood maps, Mr. Simone indicated that the maps provided by NJFloodMapper (<http://www.njfloodmapper.org>) are the most up-to-date available and the analysis only covered current flood conditions.

Commissioner Rittler Sanchez expressed concern in the lack of analysis of projected flood risks. She said that changes to land use laws take time, and it would be more beneficial to have future projections available to support those changes, especially in light of sea level rise and the location of areas of concern at confluence points.

Mr. Simone said that in the Hamilton Township RGA, wooded areas in mapped flood zones are most at risk. He said the wildfire risk is moderate. He said much of the area is already preserved. He said the recommended course of action would be to continue targeting this for acquisition and preservation.

He said there is one area at risk in the Pemberton Township RGA. He said it is a vacant, wooded parcel adjacent to Joint Base McGuire/Dix/Lakehurst. He said the wildfire and flooding risks are both high. He said the area is not currently in any of the Commission's land preservation acquisition target areas. He said the recommended course of action is to include the area as a new acquisition target area.

Mr. Simone said that the analysis resulted in no recommendations to change management areas or zoning districts. He said the recommendations were tailored to each location based on their surrounding risks, wetlands, and land preservation potential. He said the results will be useful to the Commission's work, including land acquisition under the Pinelands Conservation Fund. He said the results will also help to inform future work with municipalities on zoning changes and redevelopment plans.

Commissioner Irick mentioned the recently adopted NJDEP stormwater rules regarding the 50- and 100-year flooding projections. He asked whether topographic maps were used to establish such projections and how it related to the five-foot standard used by the Commission. Mr. Simone replied the five-foot standard was used in previous analysis and it was applied to maintain continuity in further analysis.

Commissioner Irick also inquired as to whether the five-foot standard used by the Commission is better than the assessments made by NJDEP. Mr. Simone replied that it would be a better assessment in areas where NJDEP only assessed to three feet.

Lastly, Commissioner Irick asked if the analysis would affect the requirement of flood insurance. Ms. Grogan replied that the Commission's studies would not affect flood insurance requirements. She said those requirements are based on already established risk areas.

Commissioner Mauriello expressed concern on the use of current flood mapping to analyze flood risk, as opposed to using mapping that included future projections. He said that historically, this type of analysis underestimated the amount of flooding. He mentioned the recent NJDEP inland flood rules include estimates beyond the current projections set by state studies and Federal Emergency Management Agency mapping. He recommended the use of flood mapping that includes future projections when analyzing flood risk.

Commissioner Mauriello expressed concern in the possibility of establishing mandatory 300-foot wetlands buffers with no allowance for a waiver. He cautioned that it could lead to towns taking a parcel through eminent domain.

Commissioner Mauriello inquired as to whether an analysis was made to establish areas where further development and growth could be encouraged.

Ms. Grogan said the analysis was strictly to determine whether there were areas currently zoned for development that may not be feasible due to climate change threats. She said a previous ecological integrity assessment identified areas with relatively low integrity scores that could be rezoned to allow for additional development. She said a management area change was implemented for one such area; however, the assessment did not show many areas that would be appropriate for upzoning to allow further development.

Commissioner Mauriello commented that analyzing areas to support changing zoning both for restricting development and encouraging development would provide a balance that gives credibility to the Commission's research and recommendations.

Commissioner Irick moved the recommendation to the Policy & Implementation Committee for acquisition target area changes. Commissioner Rittler Sanchez seconded the motion, and all voted in favor.

Commissioner Irick moved the recommendation for Commission staff to pursue potential changes to mandatory wetlands buffers through municipal land use ordinances. Commission Chair Matos seconded the motion, and all voted in favor.

6. Public Comment

Heidi Yeh, of the Pinelands Preservation Alliance echoed Chairman Lohbauer's sentiment regarding dual-use solar for the benefit of local farmers. She praised the flood mapping and explanation from Commission staff. She said it looks like it is a step in the right direction. She suggested the use of future projections when conducting analysis. She said it is not clear if the current analysis differs from the protections already provided by NJDEP. She said the five-foot sea level rise standard may be too conservative.

Commissioner Irick asked if any consideration was made to study the effects of climate change on threatened & endangered species. Ms. Grogan said that those effects are being observed through fieldwork conducted by the Science department.

Commissioner Rittler Sanchez asked if the staff knew how many Pinelands municipalities have tree ordinances. Ms. Grogan indicated the information could be gathered and provided to her. She said, for example, Medford Township has a tree ordinance. She said most municipal tree ordinances are likely to address only permitting requirements for the removal and/or replacement of a small number of trees, not the retention of trees for carbon sequestration purposes. She noted that the NJDEP MS4 stormwater permit requirements include municipal adoption of a model tree ordinance.

There being no further discussion, Commissioner Irick moved the closing of the meeting. Commission Chair Matos seconded the motion. The meeting was adjourned at 11:14 a.m.

Certified as true and correct:



Dawn Holgersen
Technical Assistant
March 28, 2024
Revised: April 17, 2024

Pinelands Management Area Boundary Assessment for Climate Risks

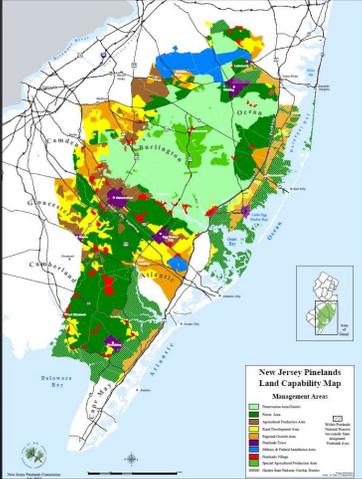
Pinelands Climate Committee
February 14, 2024

1

Pinelands Management Areas

Growth is encouraged or permitted:

- Regional Growth Areas (RGAs)
- Pinelands Towns
- Pinelands Villages



2

First Level of Analysis – Overview

RGAs
Towns
Villages

+

Wildfire
hazard

+

Flood
hazard

+

Sea level
rise
hazard

+

T&E
habitat

+

Acquisition
targets

=

Areas Needing
Further
Consideration

3

Second Level of Analysis – Overview

- ◆ **Factors Considered:** Size of area, Urban land use/land cover, Preservation status, Proportion of area in wetlands, Application status, Proximity to preserved lands and/or other Management Areas
- ◆ **39 areas at least 10 acres in size**
 - ◆ Cumulatively ~1,500 acres
 - ◆ Range: 10 acres to 169 acres
 - ◆ Average of 38 acres in size
 - ◆ Identified in RGAs, Towns, and Villages
 - ◆ 12 municipalities

4

Third Level of Analysis

- ◆ Factors Considered to refine Second Level Results:
 - ◆ Ownership
 - ◆ Zoning standards
 - ◆ Lot configurations
 - ◆ Agricultural land use/land cover
 - ◆ Vacant/developable lands
 - ◆ Regional context

5

5

Results of Third Level of Analysis

- ◆ 39 identified areas:
 - ◆ Contain multiple climate risks
 - ◆ Area delineations are irregular & result from overlapping risks
 - ◆ Adjacent lands also at risk but scored slightly lower
 - ◆ Multiple areas are grouped and should be considered in a broader context: entire lots, multiple properties, or a larger portion of the Management Area

6

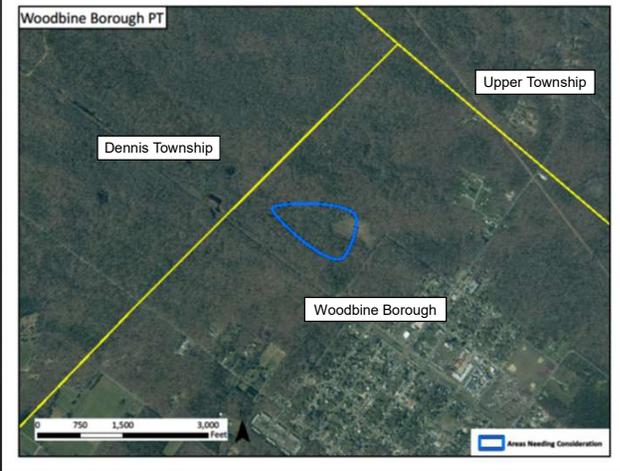
6

Results of Third Level of Analysis

- ◆ 15 of the 39 areas have existing protections (e.g., land preservation, wetlands buffers) and no future development potential
- ◆ No further action needed in these areas
- ◆ Example: Area in northern Woodbine Borough
 - ◆ Management Area: Pinelands Town
 - ◆ Extensive wetlands coverage
 - ◆ Extensive preserved lands

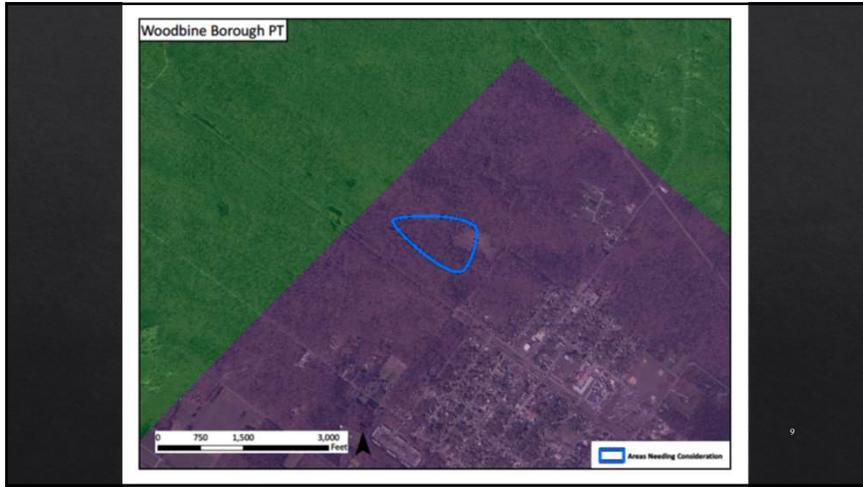
7

7



8

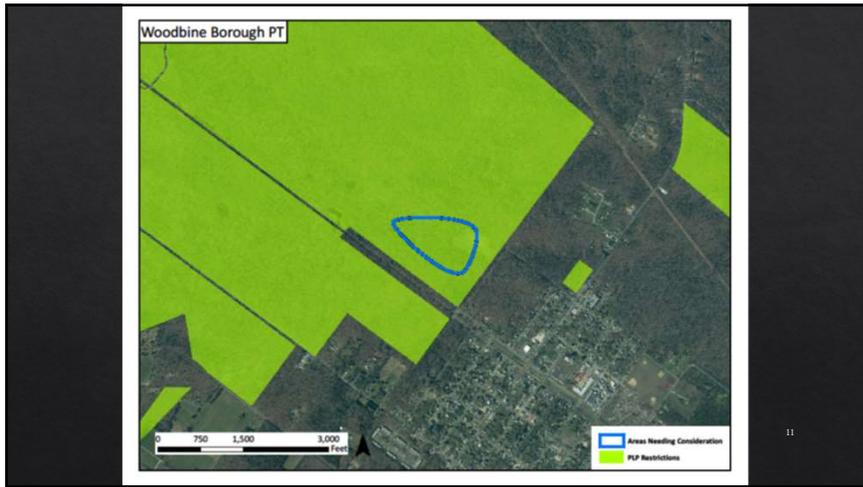
8



9



10



11

Results of Third Level of Analysis

- ◆ The remaining 24 areas are grouped based on relationship to other areas of concern & location, as follows
 - ◆ New Gretna Village
 - ◆ Sweetwater & Lower Bank Villages
 - ◆ Port Elizabeth-Bricksboro Village
 - ◆ Hamilton Township RGA
 - ◆ Pemberton Township RGA
- ◆ Resulted in specific recommendations for each of these five areas

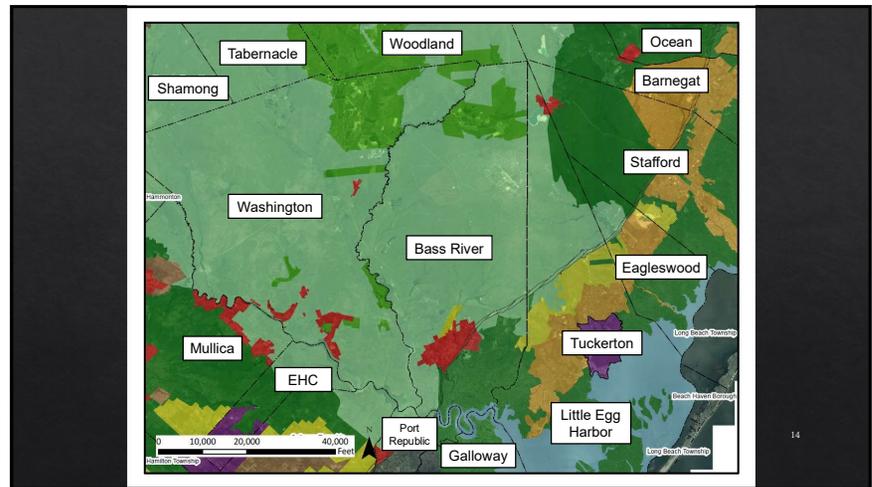
12

New Gretna Village

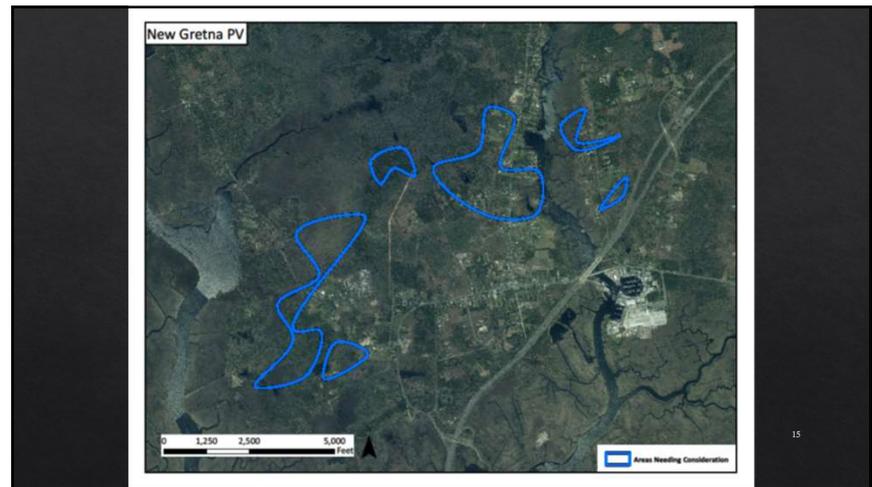
- ◆ The periphery of the Village is most at risk of the effects of climate change
- ◆ Wildfire hazards: moderate risks
- ◆ Sea level rise: greatest threat
 - ◆ 5-foot sea level rise inundation generally conforms to mapped wetland boundaries
- ◆ **Recommendation:** Mandatory 300-foot wetlands buffer in select areas

13

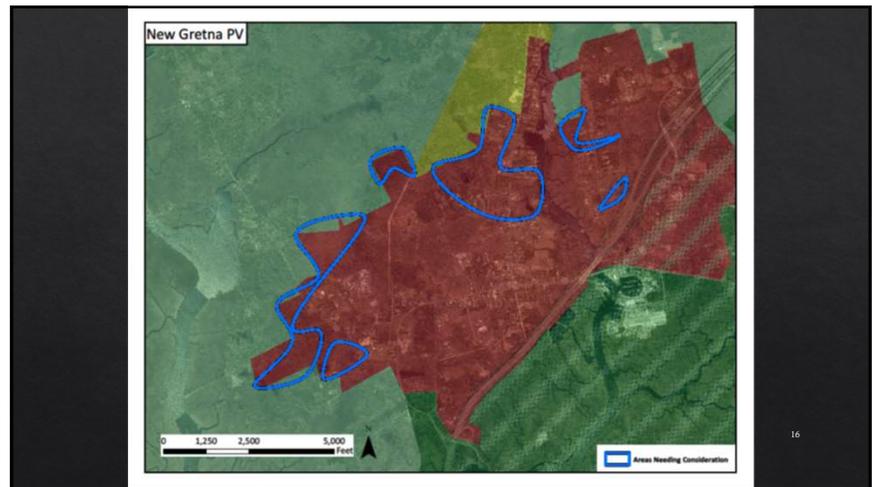
13



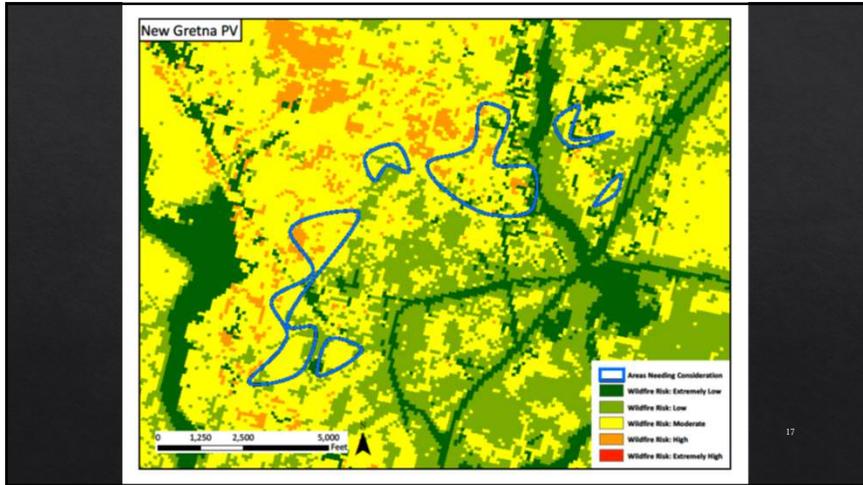
14



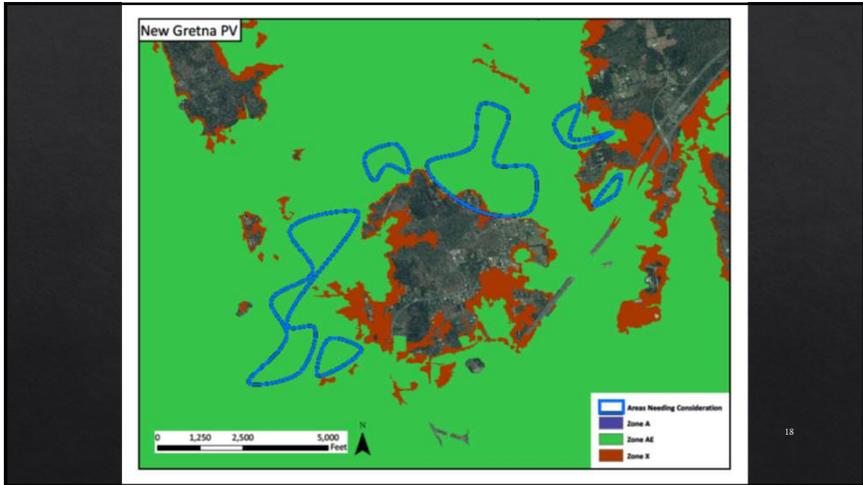
15



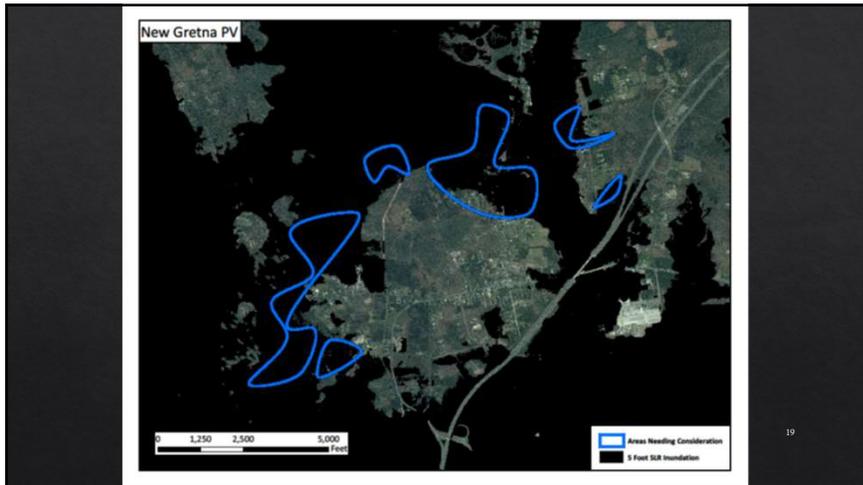
16



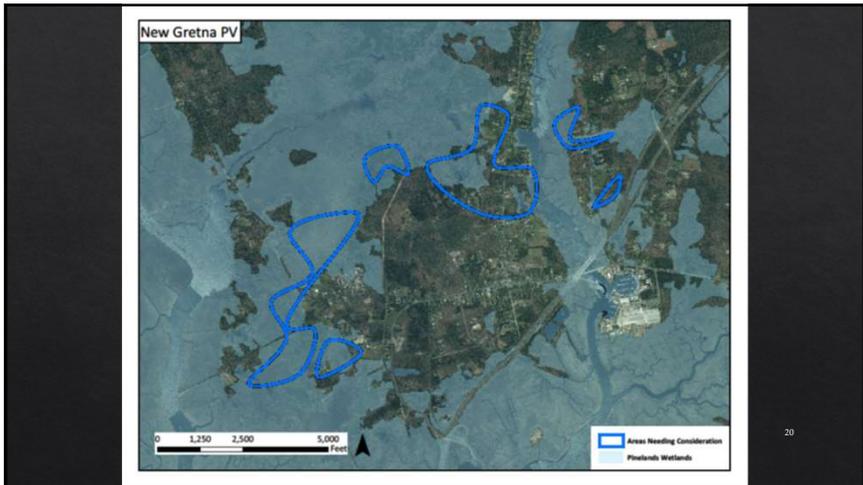
17



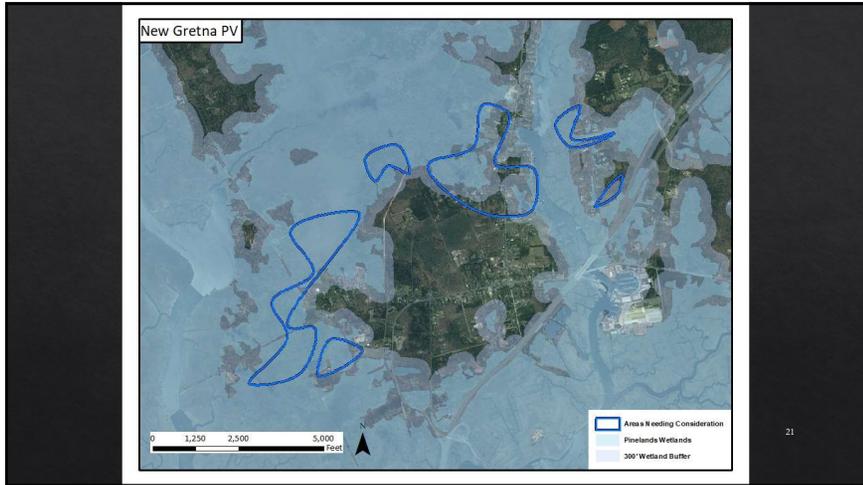
18



19



20

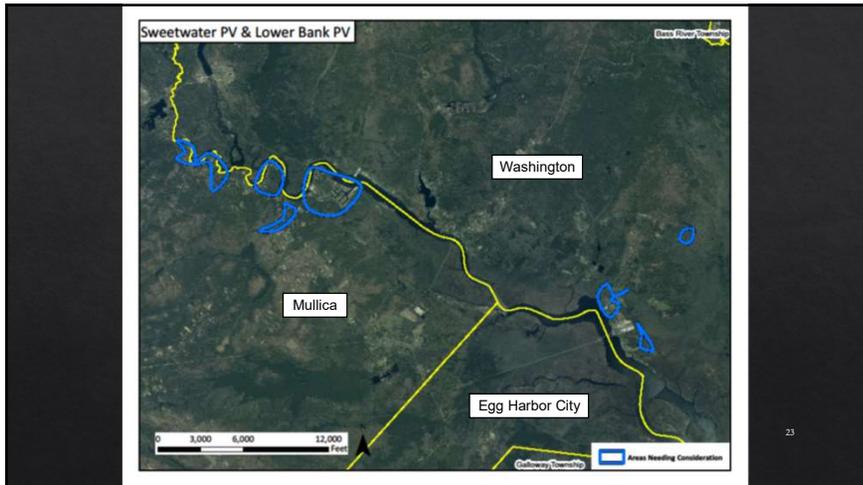


21

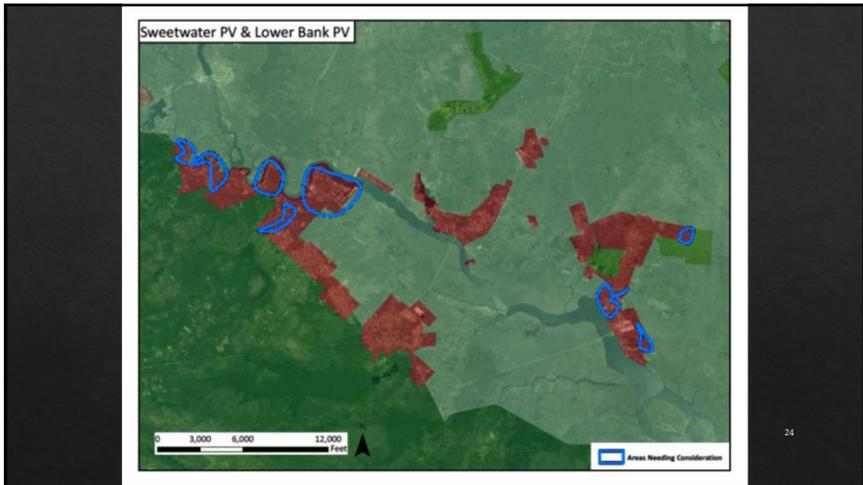
Sweetwater & Lower Bank Villages

- ◆ The riverine and wetland areas are most at risk of the effects of climate change
- ◆ Wildfire risk is moderate to high; flooding risk is high
- ◆ Some upland areas would be inundated in a 5-foot sea level rise scenario
- ◆ **Recommendation:** Mandatory 300-foot wetlands buffer and additional uplands buffer in select areas

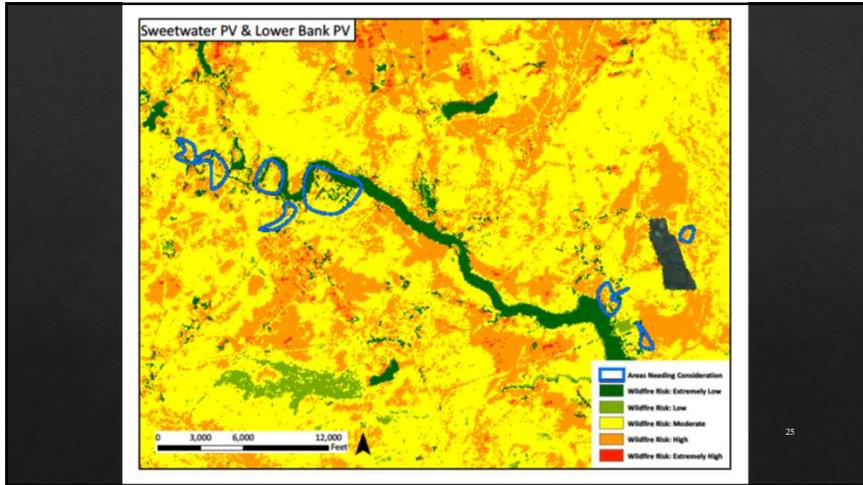
22



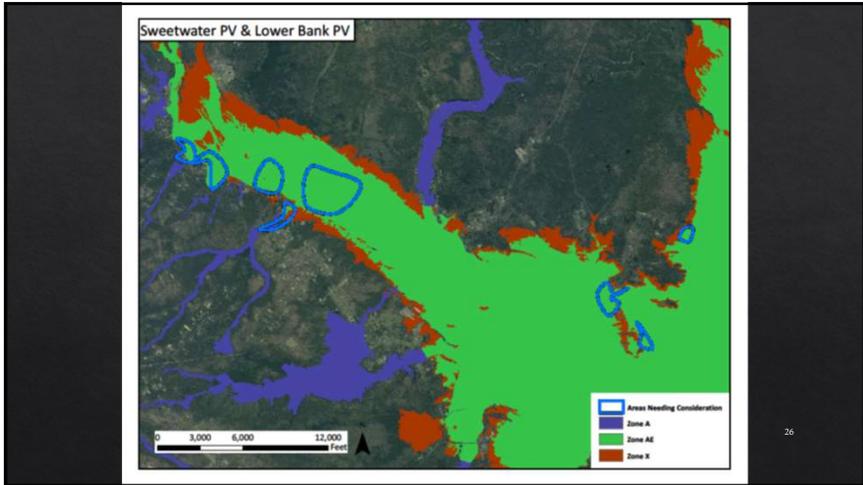
23



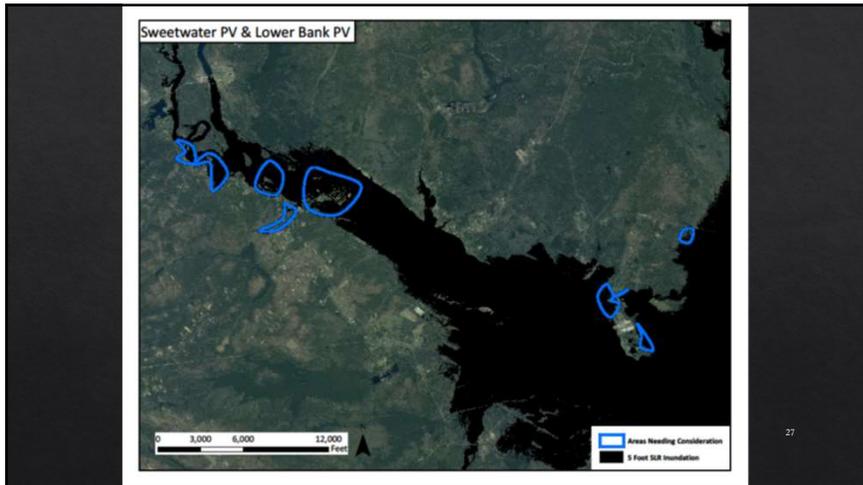
24



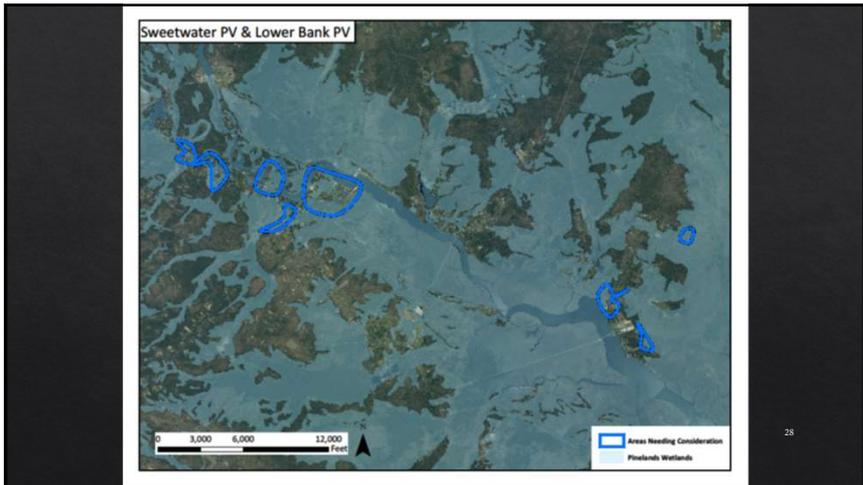
25



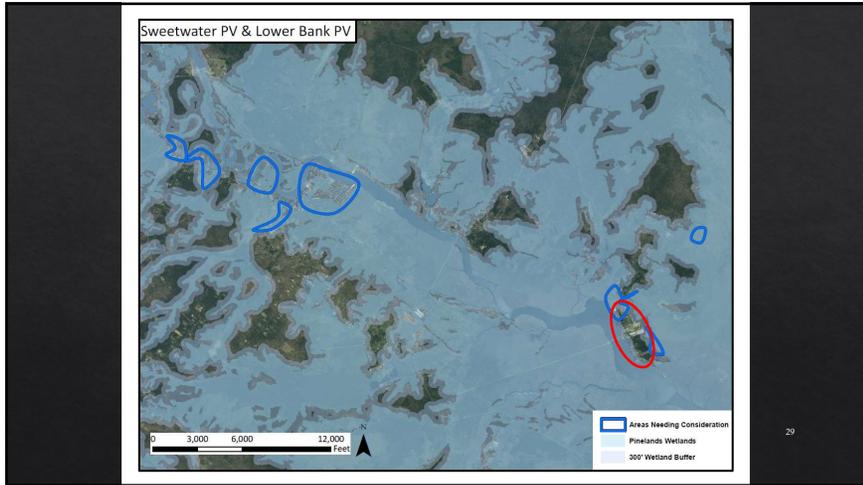
26



27



28



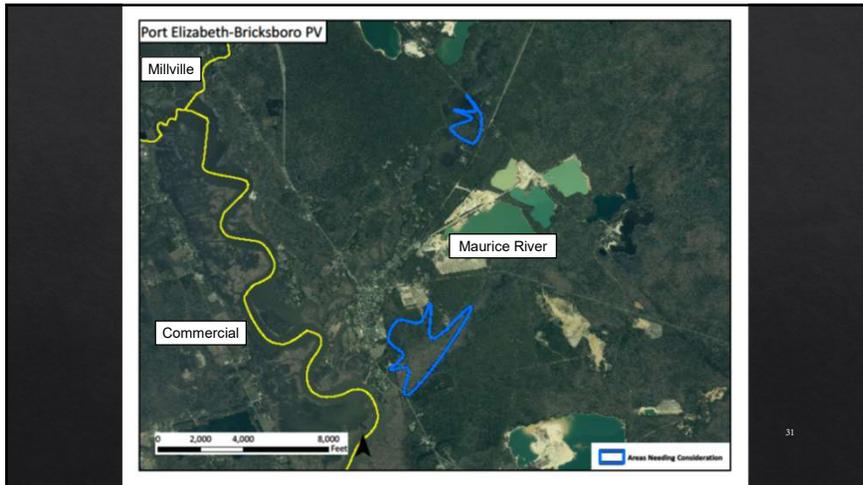
29

Port Elizabeth-Bricksboro Village

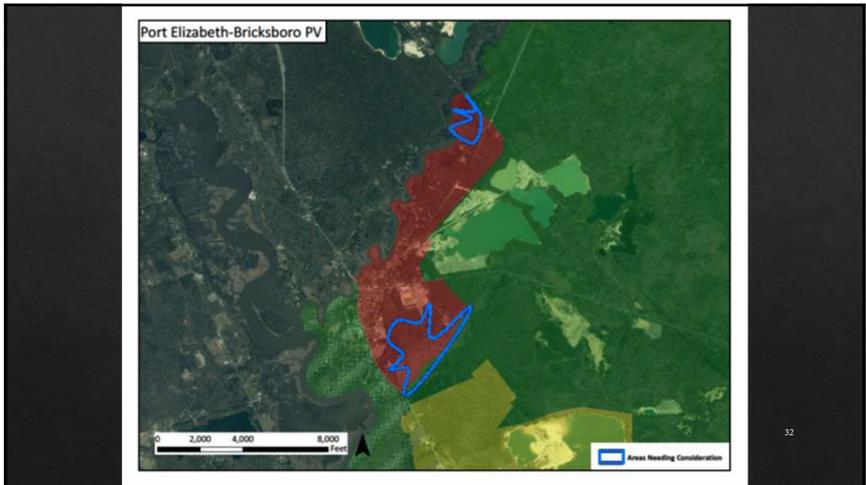
- ◆ Both upland and wetland areas are at risk
- ◆ Wildfire risk is moderate; flooding risk is high
- ◆ A portion of the Village has been previously targeted for preservation
- ◆ **Recommendations:**
 - ◆ Expansion of Acquisition Target Area (1 of 20 areas already designated by Commission)
 - ◆ Consider implementing a Density Transfer Program within the Village

30

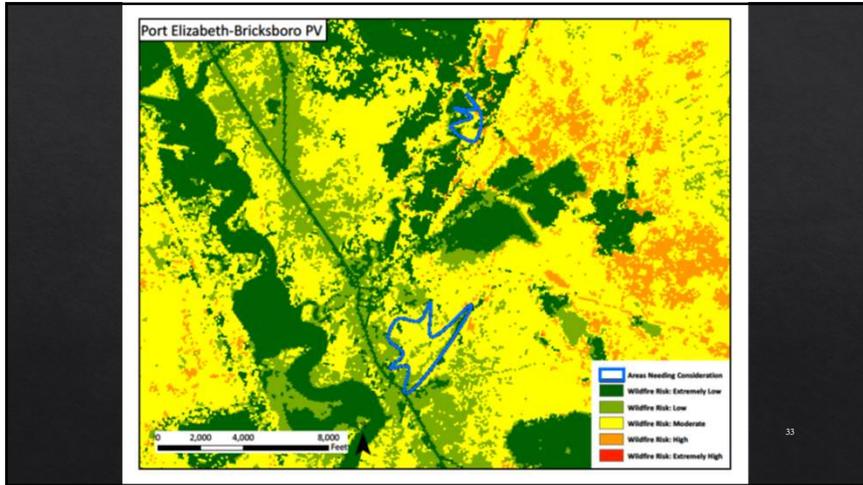
30



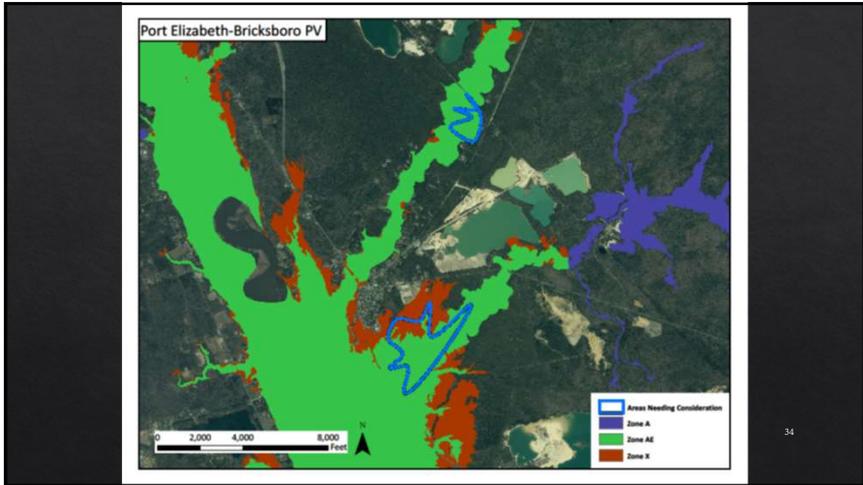
31



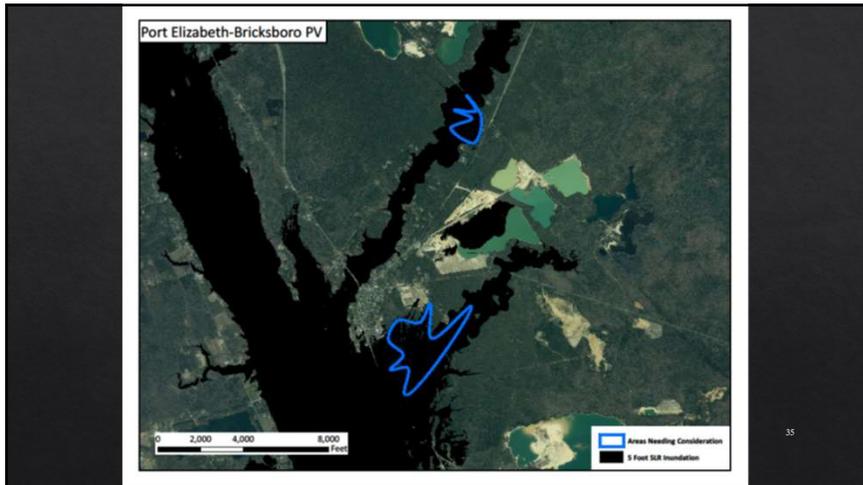
32



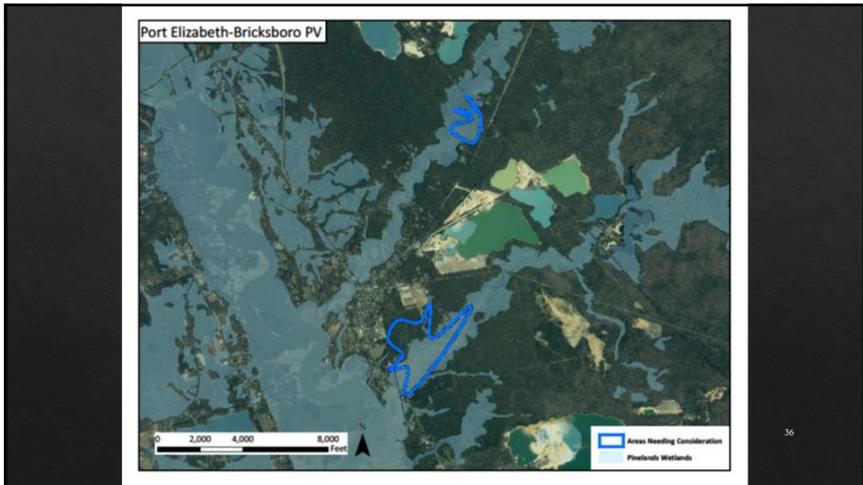
33



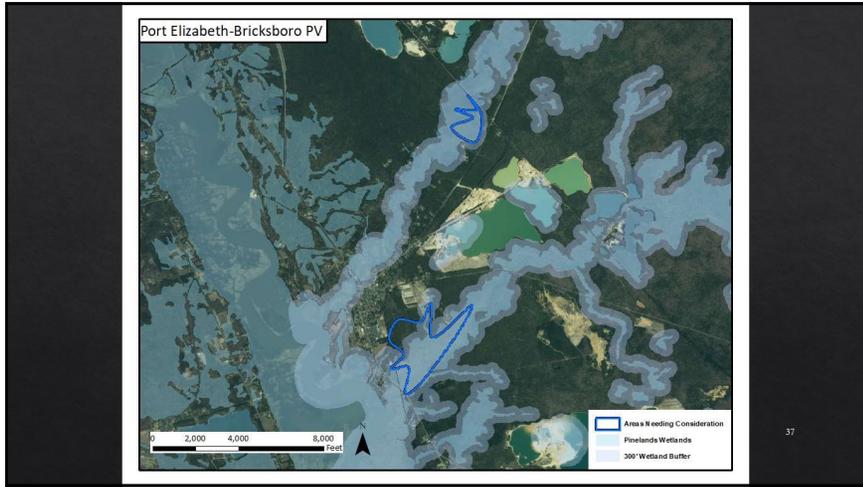
34



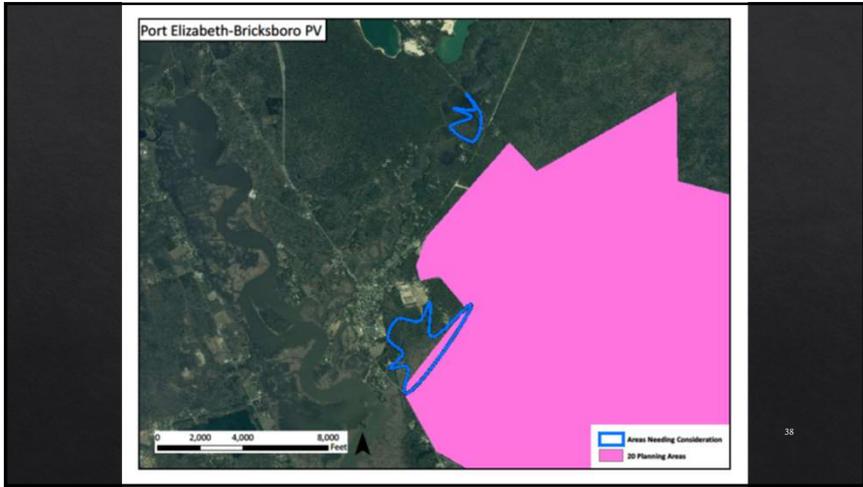
35



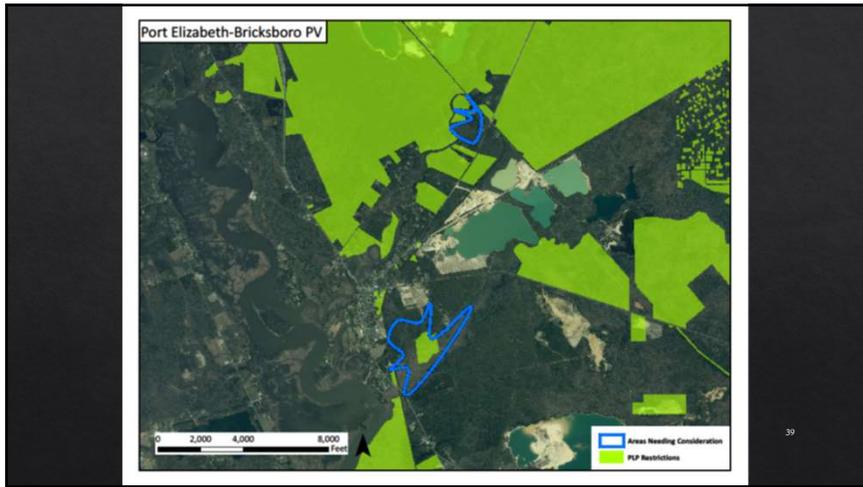
36



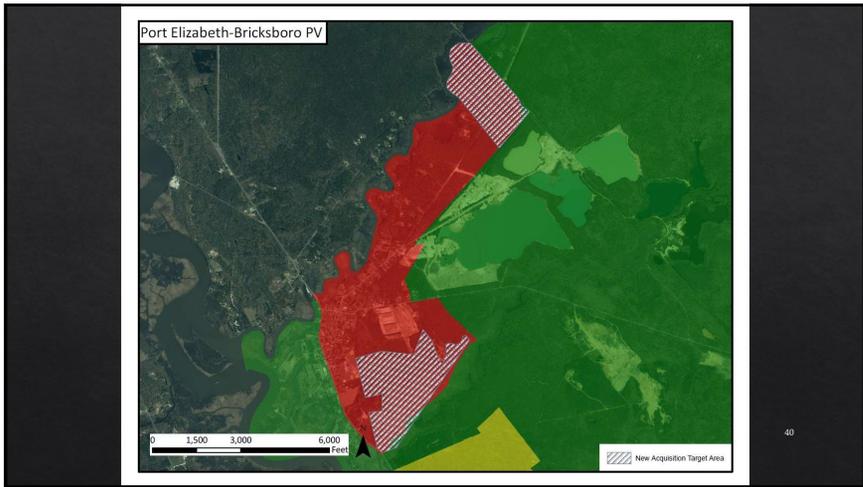
37



38



39



40

Hamilton Township RGA

- ◆ Wooded areas in mapped flood zones are most at risk
- ◆ Wildfire risk is moderate
- ◆ Much of this portion of the RGA is already preserved
- ◆ **Recommendation:** Continue to target for acquisition and preservation

41

41



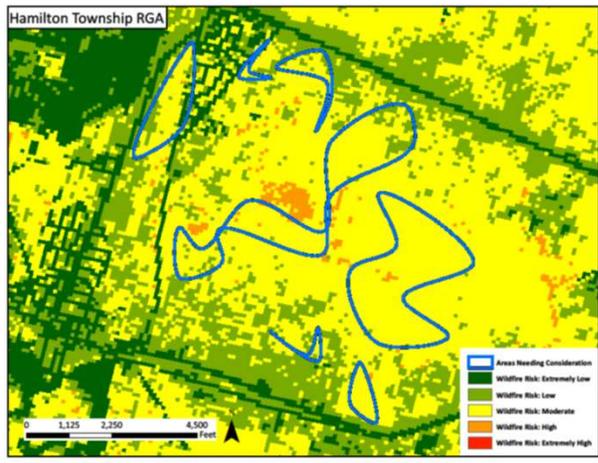
42

42



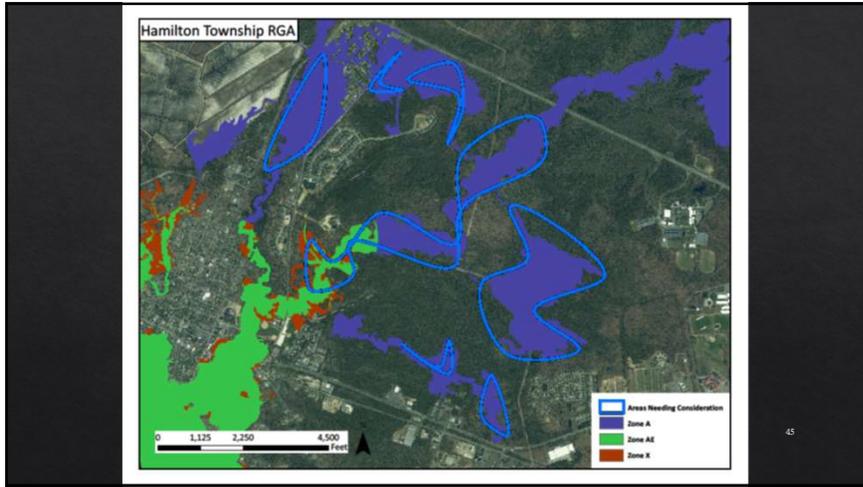
43

43

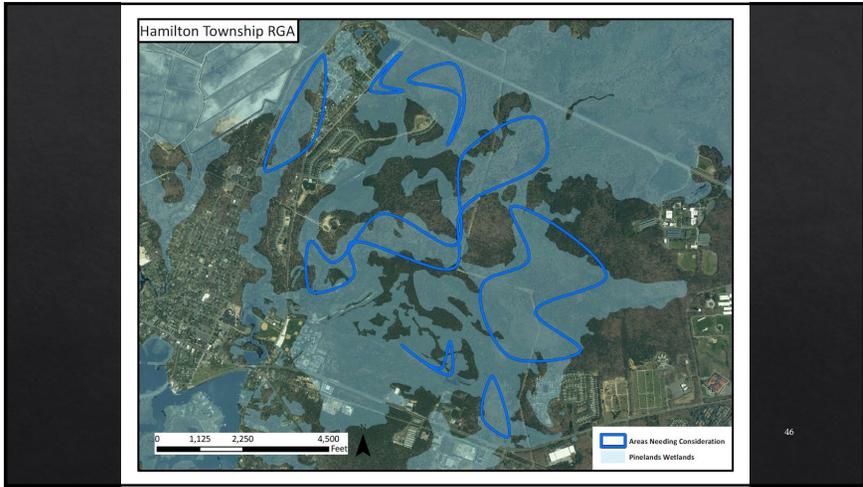


44

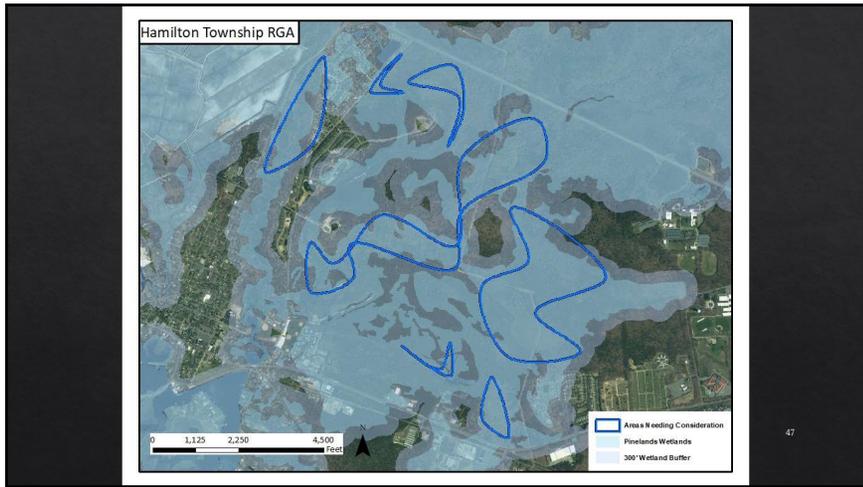
44



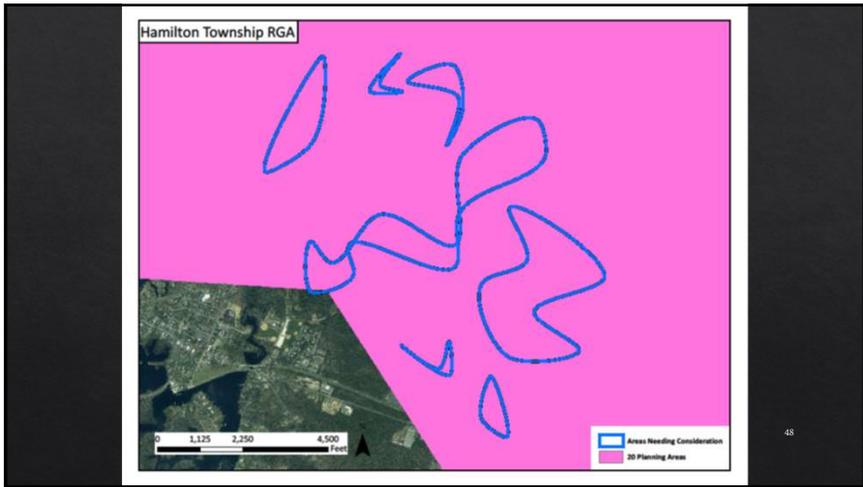
45



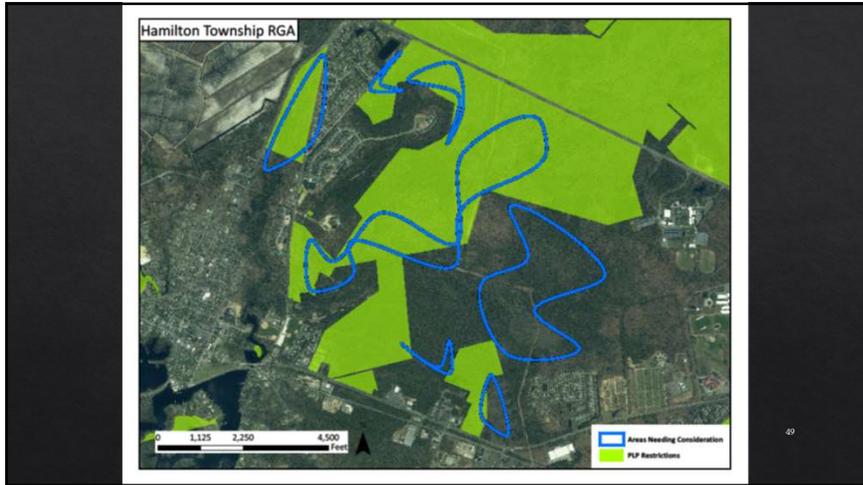
46



47



48



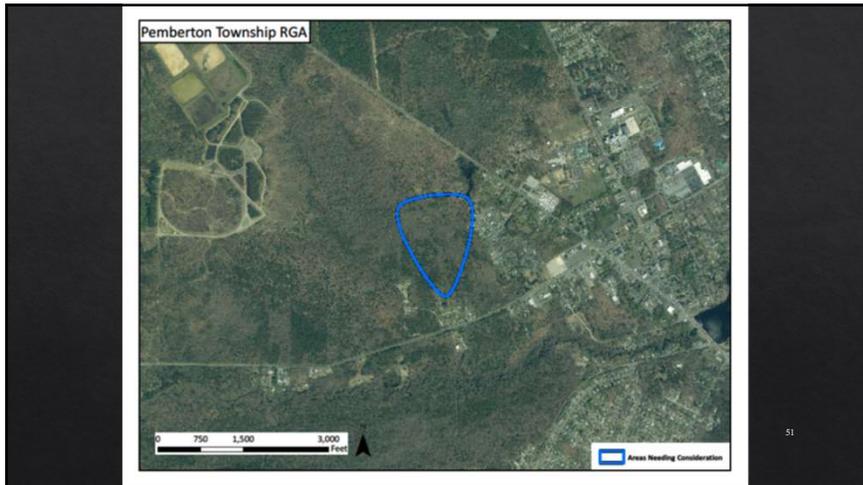
49

Pemberton Township RGA

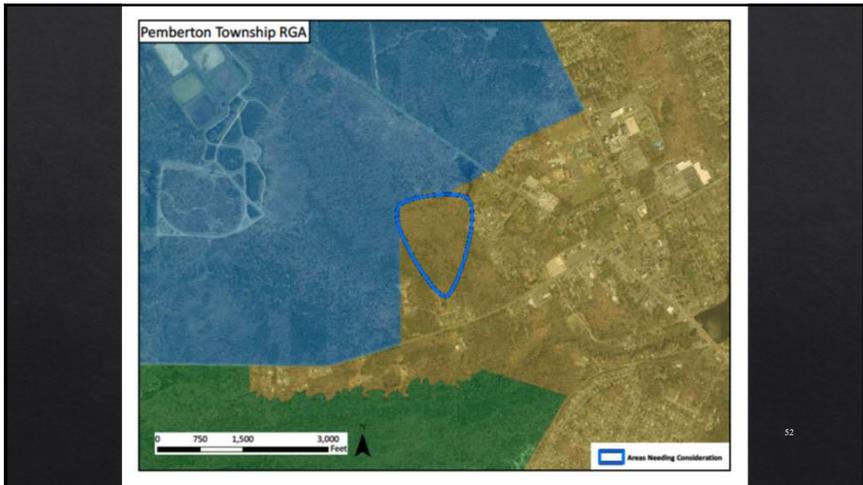
- ◆ A vacant, wooded parcel adjacent to Joint Base MDL is at risk
- ◆ Wildfire risk is mostly high
- ◆ Flooding risk is high
- ◆ Not currently in any land preservation acquisition target areas
- ◆ **Recommendation:** Include in new Acquisition Target Area

50

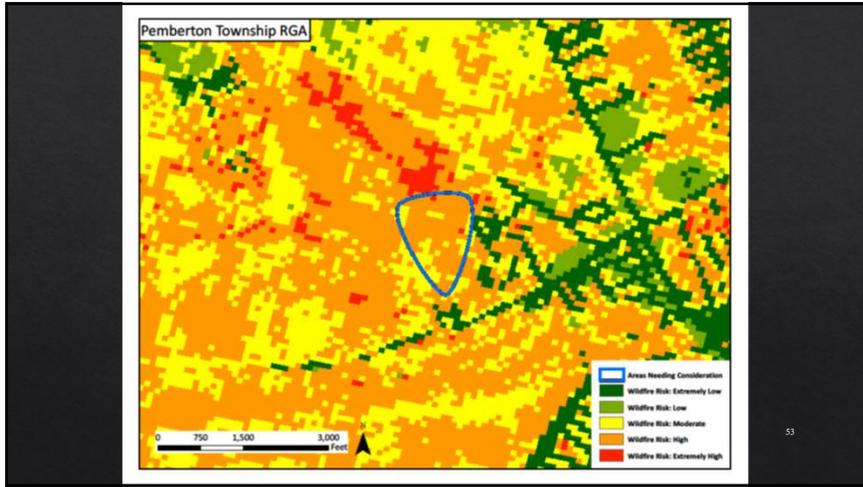
50



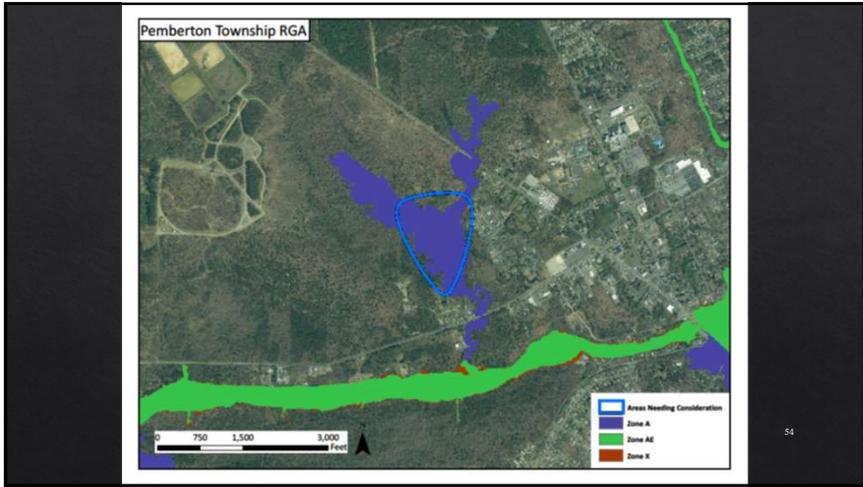
51



52



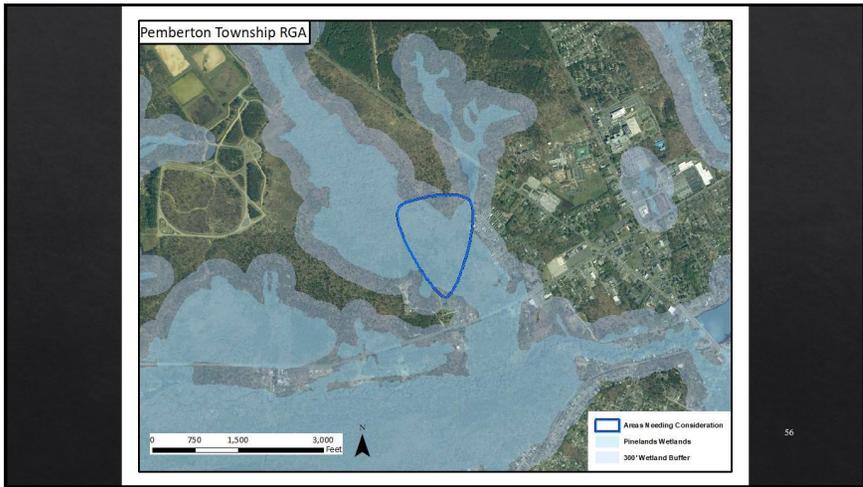
53



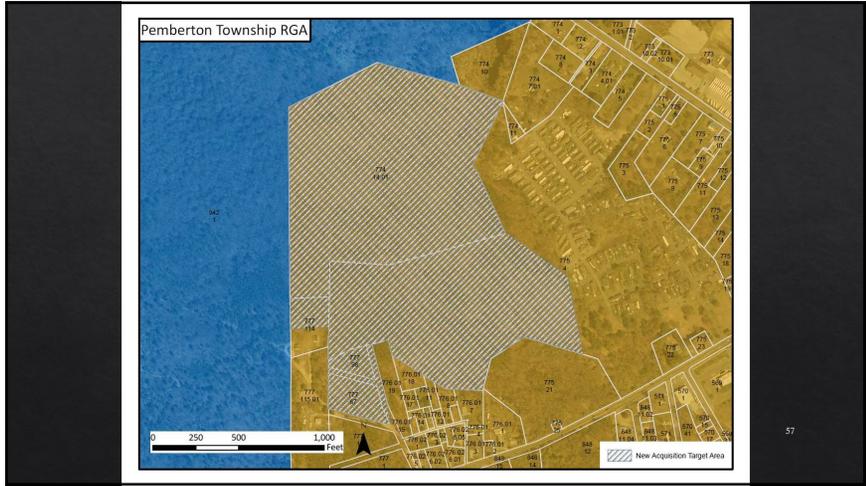
54



55



56



57

Takeaways

- ◆ No Management Area changes are recommended
- ◆ No zoning district changes are recommended
- ◆ The recommendations are tailored to each location (surrounding risks, wetlands, land preservation, etc.)
- ◆ Results will be useful to the Commission’s other objectives, such as PCF land preservation project ranking factors
- ◆ Results will help inform Commission’s future work with municipalities on zoning changes or redevelopment plans

58

Recommendations Summary

Location	Recommended Action(s)
New Gretna	Mandatory 300ft wetlands buffer in select areas
Sweetwater & Lower Bank	Mandatory 300ft wetlands buffer and additional buffer in select areas
Port Elizabeth-Bricksboro Village	<ol style="list-style-type: none"> Expand Acquisition Target Area (1 of 20 areas already designated by Commission) Possible Density Transfer Program within the Village
Hamilton Township RGA	Continue to target for acquisition and preservation
Pemberton Township RGA	Include in a new Acquisition Target Area

*Request Committee’s endorsement of Acquisition Target Area changes, as well as continued work on wetlands buffers and Density Transfer Programs.

59