



**State of New Jersey**  
 Highlands Water Protection and Planning Council  
 100 North Road (Route 513)  
 Chester, New Jersey 07930-2322  
 (908) 879-6737  
 (908) 879-4205 (fax)  
 www.highlands.state.nj.us



**WQMP AMENDMENT**  
**REVIEW CHECKLIST**

<b>PROJECT INFORMATION</b>	
<b>WQMP Name:</b> Pinnacle	<b>Date:</b> February 8, 2008
<b>Sewer Service Area/Facility:</b> Mountain View Sewage Treatment Plant	
<b>WQMP:</b> Northeast Water Quality Management Plan	
<b>WMP Agency:</b> Borough of Oakland Wastewater Management Plan	
<b>Name of Facility:</b> Pinnacle Tract	
<b>Name of Applicant:</b> Pinnacle Communities Ltd.	
<b>Sewer Service Area/Facility:</b> New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> <i>If existing provide the following:</i>	
<b>Proposed Change in Service Area Wastewater Flow:</b> 66,555 GPD	
<b>NJPDES No:</b> NJ0028002	
<b>Permit Discharge (MGD):</b>	
<b>Type of Discharge:</b> GW <input type="checkbox"/> SW <input checked="" type="checkbox"/>	
<b>Receiving Waterbody:</b> Preakness Creek (drains to Passaic River)	
<b>Total Proposed Service Area (acres):</b> ~84.5 acres	
<b>Lot and Block, if applicable:</b> Block 3101, Lots 3&6; Block 3102, Lots 1&3; Block 3103, Lots 1&2	
<b>Description of Project:</b> 209-unit residential development of which 28 are affordable housing on an approximately 84.5 acre plot. The project site was part of a 1991 court-approved settlement of a builder's remedy lawsuit. The applicant proposes to discharge wastewater from the project site into the Township of Wayne's sanitary collection system for ultimate treatment at the Mountain View Wastewater Treatment Facility.	
In June of 2005, NJDEP determined that the project qualified for Exemption 17 of the Highlands Act (Affordable Housing) because the project is a major Highlands Development located within an area designated as Planning Area 1 or Planning Area 2 as of March 29, 2004, that on or before March 29, 2004 had been the subject of a settlement agreement and stipulation of dismissal filed in the Superior Court, or a builder's remedy issued by the Superior Court, to satisfy the constitutional requirement to provide for the fulfillment of the fair share obligation of the municipality in which the development is located. However, the project is currently inconsistent with the Areawide WQMP, resulting in this proposed WQMP amendment.	

<b>LAND USE CAPABILITY MAP ZONES</b>	
<b>Sewer Service Areas Encroach Within Which LUCM Zone? (Check all that apply.):</b>	
<b>Protection Zone</b> <input checked="" type="checkbox"/>	<b>Conservation Constrained Zone</b> <input type="checkbox"/>
<b>Conservation Zone</b> <input type="checkbox"/>	<b>Existing Community Constrained Zone</b> <input type="checkbox"/>
<b>Existing Community Zone</b> <input checked="" type="checkbox"/>	
<b>HIGHLANDS ACT AREAS</b>	
<b>Project located in which Highlands Act Area? (Check all that apply.):</b>	
<b>Preservation Area</b> <input checked="" type="checkbox"/>	
<b>Planning Area</b> <input type="checkbox"/>	

TOPOGRAPHY	
Parcel Underlain by Limestone?	No
Steep Slopes >20% in Any Areas?	Yes
Steep Slopes >15% in Forested Areas?	Yes
Steep Slopes >10% in Riparian in Undeveloped Lands?	Yes
<p><b>Findings:</b> The site contains slope constraints of &gt;20%, 15% in forested areas, and 10% within riparian areas. The proposed development footprint appears to infringe on steep slopes. The applicant's EO109 Compliance Document states that steep slopes have been avoided in site planning.</p> <p><b>Policy statement:</b> To require that applications for approval through local development review and Highlands Project Review include topographic information identifying the location of any Steep Slope Protection Areas located on the parcel proposed for development (1E6).</p> <p>To require that applications for approval through local development review and Highlands Project Review involving parcels of land with slopes of 10% or greater include identification of forested lands, areas which are highly susceptible to erosion, depth to bedrock, and Soil Capability Classes (1E7).</p> <p>To prohibit through local development review and Highlands Project Review land disturbance within areas which are Severely Constrained Slopes and Moderately Constrained Slopes (1E8).</p> <p>To require through local development review and Highlands Project Review the use of low impact best development practices for any land disturbance or human development within areas which are Constrained or Limited Constrained Slopes (1E9).</p> <p><b>Recommendation:</b> Limit disturbance to areas without Severely Constrained or Moderately Constrained Slopes.</p>	

HIGHLANDS OPEN WATERS	
Parcel includes Highlands Open Waters Protection Area Buffer? <i>If No, disregard remainder of Highlands Open Waters checklist.</i>	Yes
<p><b>Highlands Open Waters description:</b>  <b>Drainage HUCs Name and Number:</b> 02030103100060 &amp; 02030103100070  <b>Name of nearest waterway:</b> Pond Brook (C1,FW2-TP) &amp; Haycock Brook (FW2-NT)</p>	
<p><b>Open Waters Protection Areas within the Service Area:</b></p> <p>Streams <input checked="" type="checkbox"/></p> <p>Lakes &amp; Ponds <input type="checkbox"/></p> <p>Wetlands <input checked="" type="checkbox"/></p>	
<p><b>Highlands Open Waters category:</b></p> <p>Highlands Waters <input checked="" type="checkbox"/></p> <p>Special Waters <input type="checkbox"/></p> <p>Exceptional Waters <input type="checkbox"/></p> <p>Intermediate Waters <input type="checkbox"/></p>	
<p><b>Watershed Value (Check one):</b></p> <p>High <input checked="" type="checkbox"/> 02030103100070</p> <p>Medium <input type="checkbox"/></p> <p>Low <input checked="" type="checkbox"/> 02030103100060</p>	
<p><b>Findings:</b> Wetlands, classified as Highlands Exceptional Waters, exist onsite. Pond Brook, a C1 tributary of the Ramapo River exists on the far northwest portion of site. Additionally, Appendix C-Fig.15 in the</p>	

applicant's EO109 Compliance Document illustrates a stream, Haycock Brook (FW2-NT) located on the southern portion of the site. NJDEP's Public Notice Document indicates that approximately 500 feet of the Pond Brook headwaters exist onsite, but have not been mapped by USGS or the Bergen Co. Soil Survey Maps. NJDEP states that these headwaters are subject to a 150-foot riparian buffer. These waters, while not mapped under Highlands Council's current stream GIS database, would be considered a Highlands Open Water and require a 300-foot protection buffer under the RMP.

NJDEP verified the boundaries of State Open Waters in the southern and northern portion of the site. The applicant is proposing a protection buffer for Haycock Brook averaged to approximately 100 feet because of the proximity of the wetlands in the southern portion of the site. This stream is a Highlands Open Water and requires a 300-foot protection buffer under the RMP, which would also apply under NJDEP rules if the project was not exempt. The northern stream (Pond Brook) is a tributary that drains to the Ramapo River, classified as C1 trout production, and is proposed by the applicant to receive a 300-foot buffer (special resource water protection area).

The applicant has received an LOI from NJDEP verifying the jurisdictional boundaries of wetlands and State Open Waters onsite. NJDEP classified the wetlands as Exceptional Resource Value due to presence of documented habitat for Barred Owl (State threatened). The Freshwater Wetlands Protection Act Rules require a standard transition area adjacent to these wetlands of 150 feet. These wetlands are a Highlands Open Water and require a 300-foot protection buffer under the RMP. NJDEP verified the presence of a smaller isolated wetland near the center of the site. The Freshwater Wetlands Protection Act Rules do not provide a protection buffer for isolated wetlands. However, this wetland is a Highlands Open Water, and is also required to have a 300-foot protection buffer under the RMP.

The applicant's EO109 Compliance Document states that the 150-foot wetlands transition area will be reduced to accommodate the development footprint. The applicant is proposing to reduce the transition area from 150 feet to 100 feet, and then to further reduce to 75 feet in some areas and expand to 125 feet in other areas, through a Transitional Area Waiver-Averaging Plan. The applicant indicates in the EO109 Compliance Document that NJDEP was of the opinion that this transition area modification, coupled with preservation of other open space on the property would not significantly impact the function of these wetlands and their transition areas as corridors for the movement of Barred Owl.

The proposed electronic copy site plan illustrates the footprint of disturbance would encroach on the Highlands 300 foot open water protection buffers.

**Policy Statement:** Preservation Area buffers for Highlands Open Waters shall comply with the Highlands Preservation Area rules as N.J.A.C. 7:38 (1D4b)

Highlands Open Waters shall include a protection buffer of 300 feet from the edge of the Highlands Open Water feature. All development shall comply with buffer standards which provide for the protection of Highlands Open Waters reviewed on a site-specific basis during local development review and Highlands Project Review (1D4).

Prohibit modifications to Highlands Open Waters protection buffers except as necessary to protect public health and safety, or to provide for minimum practical use in the absence of any alternative (1D4e).

**Recommendation:** The application should exclude Highlands 300-foot open water buffer areas from the sewer service area development footprint and development activities that would alter land use. All buildings, roads, and impervious structures should be relocated outside of each Highlands 300-foot open water buffer.

**RIPARIAN AREA**

<b>Parcel includes Riparian Area?</b> <i>If No, disregard remainder of Riparian Area checklist.</i>	Yes
--	-----

**Specific Riparian Area Features** (Check all that apply.):

<b>Flood Prone Areas</b> <input checked="" type="checkbox"/>	<b>Waters</b> <input checked="" type="checkbox"/>
<b>Riparian Soils</b> <input checked="" type="checkbox"/>	<b>Wetlands</b> <input checked="" type="checkbox"/>
<b>Wildlife Corridor</b> <input type="checkbox"/>	

**Riparian Integrity Value** (Check one):

<b>High</b> <input type="checkbox"/>
<b>Medium</b> <input checked="" type="checkbox"/>
<b>Low</b> <input type="checkbox"/>

**Findings:** Riparian areas exists onsite. The applicant’s EO109 Compliance Document indicates that NJDEP requires a 75-foot riparian buffer for Haycock Brook on the southern portion of the site.

The proposed site plan includes roadways, building units, and stormwater infrastructure located within the riparian buffer along both Haycock Brook and upstream of the 300-foot special water resource protection area for Pond Brook. The proposed site plan includes one building located within the 150-foot riparian buffer of the headwaters of Pond Brook. The applicant states that alternative locations for this building do not exist on the project site.

Appendix C-Fig.15 in the applicant’s EO109 Compliance Document illustrates the site plan would minimally encroach on areas including Highlands riparian areas.

**Policy Statement:** Limit alterations to existing natural vegetation or increases in impervious area within high and moderate integrity riparian areas to the minimum extent feasible in areas beyond the Highlands open water buffer requirement; protect the water quality of adjacent highlands open water; and maintain or restore habitat value of the riparian area (1D5b).

Restrict new land uses or the alteration of existing land uses that would alter or be detrimental to the water quality and habitat value of a Highlands Open Water or a Riparian Area (1D6a).

Prohibit modifications to Highlands Open Water buffer requirements or Riparian Areas, except as necessary to protect public health and safety, or to provide for minimum practical use in the absence of any alternative (1D6b).

**Recommendation:** The application should exclude riparian areas from the sewer service area and the development footprint, including roadways, building units, and stormwater infrastructure located within Pond Brook’s headwaters riparian area and the proposed buildings located within Haycock Brook’s riparian area. Location of development within the riparian areas is inconsistent with RMP policies prohibiting land uses that would alter or be detrimental to the water quality of a Highlands Open Water. Increases of impervious areas should be limited to the minimum extent necessary. Alteration of natural vegetation that would alter or be detrimental to the T&E habitat associated with the site’s riparian corridors, or detrimental to the water quality within Haycock Brook and Pond Brook, including its headwaters, should also be prohibited as inconsistent with the RMP.

**FOREST**

<b>Parcel within Forest Resource Area?</b>	No
--	----

<b>If yes to above, is there Encroachment into a Forest within Forest Resource Area?</b>	No
--	----

**Forest Indicators (check all that apply):**

**Total Forest**

<b>Core Forest</b>	<input type="checkbox"/>
<b>Forest Patch</b>	<input type="checkbox"/>

**Forest Integrity Value (check one):**

<b>High</b>	<input checked="" type="checkbox"/>
<b>Medium</b>	<input type="checkbox"/>
<b>Low</b>	<input checked="" type="checkbox"/>

**Findings:** Nearly 100% of the site contains forested lands that are outside the Forest Resource Area. The northern portion of the site is classified as low integrity forested subwatershed while the southern portion of the site is classified as high integrity.

The applicant is proposing to designate 16 acres of forest (~20% of property) as conservation areas as part of the development plan. Appendix C-Fig.15 in the applicant's EO109 Compliance Document illustrates the site plan includes Forest Conservation Areas.

**Policy Statement:** Forestry activities will be allowed within a Forest Resource Area or forested lands within a High Integrity Forest Subwatershed only in compliance with an approved Forest Management Plan (1B6a).

To meet the goal for the Preservation Area to preserve extensive and, to the maximum extent possible, contiguous areas of land in its natural state," and to "protect the natural, scenic, and other resources of the Highlands Region, including but not limited to contiguous forests. (1A1)

Applications for local development review and Highlands Project Review require identification of any forest area on and adjacent to a site in accordance with the Highland Council's Alternate Method for Identifying Upland Forest Areas in the Highlands Region (1B5a).

**Recommendation:** The applicant should be required to identify upland forest areas in accordance with the Highlands Council Alternate Method for Identifying Upland Forest Areas in the Highlands Region. Development activities should minimize removal of woody vegetation and be required to utilize low impact development best management practices and an approved forest mitigation plan.

**CRITICAL HABITAT**

<b>Critical Habitat (Landscape 2-5)?</b>	Yes						
<b>Significant Natural Area?</b>	No						
<b>Vernal Habitat +1,000 ft?</b>	No						
<b>Species of Concern:</b>	Barred Owl						
<b>Landscape Rank:</b>	3						

**Findings:** The entire site is mapped as habitat for Barred Owl (Landscape Rank 3, Highlands Conservation Rank 2). NJDEP's Public Notice Document indicates that the site is identified as part of the Preakness Mountain Natural Heritage Priority Macrosite. Highlands Council review does not incorporate NHP Macrosites.

The applicant's EO109 Compliance Document states that NJDEP has agreed with a report from Maser Consulting, P.A. that the property is likely functioning as a corridor for Barred Owl, and not as breeding or nesting habitat. The applicant hired Maser Consulting to perform a Barred Owl study of the property from May-August 2002. The result of their investigation concluded that Barred Owl is not present due to lack of a response to vocalization recordings. The applicant's Barred Owl Habitat Assessment document states that "Barred Owl prefers large, unfragmented blocks of forest, including swamps, riparian corridors, and upland areas." The document concludes that the site contains "marginal" habitat for Barred Owl use because it

does contain vegetative community characteristics that support Barred Owl habitat, but includes locational factors like lack of appropriate forest and wetland size, presence of human disturbance, and presence of known predators.

The applicant's EO109 Compliance Document states that NJDEP recommended that an application be submitted for a Transition Area Waiver requesting that the standard wetlands transition area be reduced from 150 feet to 100 feet. The Transition Area Waiver-Averaging Plan proposes to further reduce the transition area to 75 feet in some areas and expand to 125 feet in other areas. The applicant indicates in the EO109 Compliance Document that NJDEP was of the opinion that this transition area modification, coupled with preservation of other open space on the property would not significantly impact the function of these wetlands and their transition areas as corridors for the movement of Barred Owl.

It should be noted the NJDEP-Land Use Regulation Program (LURP) has regulatory authority over T&E habitat only as it pertains to the Freshwater Wetlands Protection Act Rules, thereby limiting their jurisdictional scope to the habitat located within and adjacent to the onsite wetlands.

The Highlands Council review has identified the entire site as Barred Owl habitat, and therefore consistency with RMP policies is addressed for all onsite habitat, not just that located within and adjacent to the onsite wetlands.

**Policy Statement:** To prohibit, through Plan Conformance, local development review, and Highlands Project Review, the direct impact of new human development or expansion or increased intensity of existing development within Critical Wildlife Habitats, Significant Natural Areas, or within 1,000 feet of Vernal Pools (1F1).

Prohibit alteration or disturbance of Critical Wildlife Habitat, Significant Natural Areas, and within 1,000 feet of Vernal Pools, except as necessary to protect public health and safety, or to provide for minimum practical use of in the absence of any alternative (1F5a).

Require that any disturbance to a critical habitat feature include mitigation for all adverse modification and provide for no net loss of habitat value (1F5b).

**Recommendation:** NJDEP-LURP has stated that the site functions as a migration corridor, but not breeding or nesting habitat for Barred Owl. NJDEP-LURP has regulatory authority over T&E habitat only as it pertains to the Freshwater Wetlands Protection Act Rules, thereby limiting their jurisdictional scope to the habitat located within and adjacent to the onsite wetlands. The Highlands Council recommends that any disturbance to the mapped habitat for Barred Owl on the entire site, not just that located within and adjacent to the onsite wetlands, will result in forest fragmentation, which would be inconsistent with the policy statement prohibiting the alteration or disturbance of critical wildlife habitat. Development activities should be required to avoid direct alteration or disturbance of critical wildlife habitat. These areas should be protected from damage or destruction resulting from indirect impact of development activities.

**AGRICULTURE**

Parcel within Agricultural Resource Area?	No
Important Farmland Soils?	Yes

**Findings:** Important farmland soils occur onsite. No agricultural activities occur onsite.

**Policy Statement:** N/A

**Recommendation:** No recommendation

**WATER QUALITY**

<b>Parcel Prime Ground Water Recharge Area?</b>	Yes
<b>Parcel Wellhead Protection Area?</b>	No
<p><b>If yes to above, check one box below:</b>  <b>Tier 1</b> <input type="checkbox"/>  <b>Tier 2</b> <input type="checkbox"/>  <b>Tier 3</b> <input type="checkbox"/></p>	
<p><b>Drainage HUCs Name and Number:</b> Crystal Lake/Pond Brook--02030103100060 &amp; Ramapo River (below Crystal Lake bridge)--02030103100070  <b>Name of nearest waterways:</b> Pond Brook; Haycock Brook  <b>SWQS Classification:</b> Pond Brook = FW2-TP (C1); Haycock Brook = FW2-NT  <b>Description of Impairments, or TMDL:</b> Ramapo River (below Crystal Lake bridge) subwatershed (02030103100070) is designated as non-attainment for Aquatic Life (general) and Aquatic Life (trout).</p>	
<p><b>Findings:</b> Prime recharge areas are located extensively onsite. Ramapo River (below Crystal Lake bridge) subwatershed (02030103100070) is designated as non-attainment (Sublist 5) for Aquatic Life (general) and Aquatic Life (trout), and has a proposed total phosphorus TMDL (Sublist 4A) for Primary Contact Recreation. Parameters for which the subwatershed is non-attaining include dissolved oxygen, pH, and total phosphorus.</p> <p><b>Policy Statement:</b> Restrict through local development review and Highlands Project Review development activities and other activities which result in reduction to ground water recharge volumes or will contribute to or result in water quality degradation within Prime Ground Water Recharge Area (2D3b).</p> <p>To prohibit uses of land within a Prime Ground Water Recharge Area that may reduce recharge volumes or other uses that may impair water quality within or draining to a Prime Ground Water Recharge Area (2D4).</p> <p>Prohibit the creation of impervious surfaces and other surfaces that significantly impede recharge within a Prime Ground Water Recharge Area, and restrict other land uses that may degrade water quality within or draining to a Prime Ground Water Recharge Area (2D5a).</p> <p>Allow for modifications to Prime Ground Water Recharge Area protection requirements, such as increases in impervious cover or loss of forest or other natural land cover, only upon demonstration that any relief from protection requirements will not impair or reduce ground water recharge quality or volumes and are necessary to protect public health and safety, or to provide for minimum practical use in the absence of any alternative (2D5b).</p> <p>Implement a requirement through local development review and Highlands Project Review that any development activity in a Prime Ground Water Recharge Area demonstrate that an equivalent of 125% of pre-existing recharge volumes of the site will be provided for within the same subwatershed, or by other means as determined by the Highlands Council (2D4a).</p> <p>Ensure that new land uses draining to a stream designated as impaired but lacking a TMDL (i.e., Sublist 5) avoid increased pollutant loadings for the parameter or parameters for which a TMDL is required (2G3b).</p> <p>Wastewater Management Plans or amendments shall demonstrate that the proposed service area will not directly or indirectly support development that would be in violation of an adopted TMDL (2G3c).</p> <p><b>Recommendation:</b> The creation of impervious surfaces or modification of prime ground water recharge areas are only allowed for public health and safety or for minimal practical use of the site, neither of which apply to this project. Therefore the project area must be relocated such that it does not</p>	

alter prime ground water recharge areas, or contribute to water quality degradation. Any disturbance of prime ground water recharge areas requires recharge of 125% of pre-existing recharge volumes of the site.

Wastewater discharge to Mountain View STP and on-site stormwater BMPs shall not violate loads associated with impairments within the subwatershed in which the proposed development is located, and for proposed TMDLs for total phosphorus in the Ramapo River (below Crystal Lake bridge) subwatershed.

**WATER CAPACITY**

Site: Pinnacle Tract

Potable Water Supply: YES

Domestic? No

*If Domestic, source HUC:*

Public Community Water System? Yes

If PCWS, Name of Facility: Oakland Water Department

PCWS ID No.? 242001

<i>Source Water HUC:</i>	<i>Net Availability (MGD)</i>	<i>Conditional Availability (MGD)</i>
02030103100050	-2.981080	0.0091
02030103100060	-0.335741	0.0103
02030103100070	-0.133671	0.0082

**Total Projected Water Demand (MGD):** Estimated ~43,890-50,996 GPD (by applicant)  
 66,255 GPD (calculated by Highlands Council)

**HUC Constraint:**

Current Deficit Area

Existing Constrained Area

**Findings:** Proposed water main extension from adjacent Oxford Water Department service area. Source wells are located within three subwatersheds, including two within the project site. All subwatersheds are currently in deficit. Water use is depletive because the proposed water withdrawal is piped to a wastewater treatment facility located in a different subwatershed. Any additional depletive water use would be subject to a 125% mitigation within the source subwatersheds, which is feasible for at least two subwatersheds. Total conditional availability between the three subwatersheds for the depletive use is 27,600 GPD, which is inadequate for the project. Note that the recalculated water demand was increased to match the anticipated wastewater flows. Actual water use will be higher than wastewater flows due to outdoor uses during the growing season.

**Policy Statements:** The Highlands Act limits or prohibits the construction of new public water systems or the extension of existing public water systems into the Preservation Area except in the case of existing public health and safety and except to serve development in the Preservation Area that is exempt.

To minimize, through Plan Conformance, local development review and Highlands Project Review, the extension of public water supply systems with the Protection Zone and the Conservation Zone for the protection of water resources (2J4).

Accommodate compact development served by existing or proposed public water supply systems only where such development is within or immediately adjacent to an existing service area provides for the clustering or aggregation of development that will preserve at least 80 percent of the project area in perpetuity for environmental protection or agricultural purposes and the development impacts are otherwise consistent with the goals and requirements of the Plan (2J4b).



Require that new residential development served by public community water systems be at a minimum density of 1/2-acre per dwelling unit for the developed part of the site (i.e., not including wetlands, open water buffers, recreational space), to ensure cost-effective utility service (2J8c).

A Current Deficit Area subwatershed that is primarily within the Protection Zone or Conservation Zone shall be assigned a Conditional New Water Availability of 1% of Ground Water Capacity, based on the Low Flow Margin Method, conditioned upon prior implementation or commitment for implementation of the 125% mitigation requirement in Objective 2B4b (2B5b).

To apply standards in the Protection Zone designed to maintain the integrity of aquatic ecosystems, recognizing the regional significance of these resources. Consumptive and depletive water uses and associated land uses shall be stringently limited (2B8).

Give highest priority for the use of Net Water Availability to Highlands Redevelopment Areas and Receiving Zones as designated by the Highlands Council (2B8d).

Prevent net increases in consumptive and depletive water uses in current water deficit areas to prevent exacerbation of and help reduce or eliminate the deficit to ensure sustainable water supply, water resource and ecological values, emphasizing techniques including, but not limited to water reuse, recycling and conservation (2B8b).

Prohibit new, expanded or extended public water systems unless they are shown to be necessary for and are approved by the Highlands Council to address documented threat to public health and safety where no alternative is feasible, to serve a designated Highlands Redevelopment Area, or cluster development, or to provide for minimum practical use in the absence of any alternative through issuance of a waiver by NJDEP or the Highlands Council, and will maximize the protection of sensitive environmental resources (2J4a).

All water users within a current deficit area or existing constrained area shall seek funding and opportunities to prevent exacerbation of and help reduce or eliminate existing deficits to ensure sustainable water supply, water resource and ecological values, emphasizing techniques including, but not limited to water reuse, recycling and conservation (2B4c).

**Recommendation:** Because the application qualifies for Exemption #17 of the Highlands Act, the extension of public water utility in the Preservation Area is allowed. However, the application is inconsistent with other water availability and water use policies in the Protection Zone. Specifically, the expansion of public water systems into the Projection Zone is prohibited unless for public health and safety, to serve a redevelopment area, for cluster development, or for minimum practical use of the site. None of these conditions applies in this instance. It is also noted that the three subwatersheds have extensive areas of Existing Community Zone within them, where the priority for capacity is TDR receiving areas. However, with a conflict between the two, the exemption rather than the RMP must drive the determination of consistency with the Act regarding extension of public water utilities.

The residential development apparently meets the requirement that an area served by water and wastewater utilities be at a minimum density of 1/2-acre per dwelling unit.

The amount of conditional water availability from the three subwatersheds is insufficient for the proposed water demand of the project, regardless of mitigation, and therefore is inconsistent with the RMP. If the applicant were permitted to the use conditional water availability from each of the three source watersheds (a decision to be decided by the Council), the 27,600 GPD conditionally available for depletive uses is less than half of what is proposed. Therefore, the projected water demand must be reduced to a maximum of 27,600 GPD. In addition, it should be noted the proposed uses would

completely deplete all conditional water availability and prevent any additional water use in those areas until a Water Management Plan is approved by the Highlands Council.

The applicant must also provide a 125% mitigation of the conditional water availability (potentially 34,500 GPD if they use of all 3 subwatersheds' conditional water availability is granted). While this can be accomplished onsite in two subwatersheds, the applicant must find a means to provide mitigation in the third subwatershed, or the applicant must demonstrate that the three subwatersheds are hydrogeologically connected.

**WASTEWATER CAPACITY**

**Name of Facility:** Pinnacle

**NJPDES Permit Number:** NJ0028002

**Projected Flow (GPD):** 66,555 GPD

**HDSF Facility?** Mountain View STP is located outside Highlands Region No

**HDSF Available Capacity (MGD):**

**Subject to Allocation Agreement?** UNK

**Allocating Capacity:** N/A

**Extent of HDSF Service Area Included in WMP:** Full  Partial

**Wastewater Treatment Facility:**

<b>New:</b>	<b>Wastewater Discharge Flow (MGD)</b>
-------------	--

Individual Septic:	Existing	<input type="checkbox"/>	Proposed	<input type="checkbox"/>	Existing:	Future:
--------------------	----------	--------------------------	----------	--------------------------	-----------	---------

NJPDES-DGW:	Existing	<input type="checkbox"/>	Proposed	<input type="checkbox"/>	Existing:	Future:
-------------	----------	--------------------------	----------	--------------------------	-----------	---------

NJPDES-DSW:	Existing	<input checked="" type="checkbox"/>	Proposed	<input type="checkbox"/>	Existing: 0.4-0.5MGD	Future:
-------------	----------	-------------------------------------	----------	--------------------------	----------------------	---------

**Findings:** The project will connect into Mountain View STP collection system, which is located outside of the Highlands Region.

**Policy Statement:** The Highlands Act revokes designated sewer service areas for which wastewater collection systems have not been installed on the date of enactment of the Highlands Act into the Preservation Area except if necessary to serve development in the Preservation Area that is exempt (2I1).

Prohibit new, expanded, or extended wastewater collection or treatment outside of Existing Areas Served (in the Protection and Conservation Zones) unless they are shown to be necessary for and are approved by the Highlands Council to address documented threat to public health and safety where no alternative is feasible, to serve a Highlands Redevelopment Area, or cluster development, or to provide for minimum practical use in the absence of any alternative through issuance of a waiver by NJDEP or the Highlands Council, and will maximize the protection of sensitive environmental resources (2K3b).

Prohibit expansion of a public wastewater collection and treatment systems and community on-site treatment facilities within the Preservation Area except as provided by the Highlands Act, and within Open Water buffer areas, Riparian Areas, the forested portion of the Forest Resource Area, agricultural lands of Agricultural Resource Areas, Steep Slopes, and Critical Habitat Areas unless they are shown to be necessary for and are approved by the Highlands Council to address documented threat to public health and safety where no alternative is feasible, cluster development (see Objectives 2K3d and 2K3f), Highlands Redevelopment Areas, or to provide for minimum practical use in the absence of any alternative through issuance of a waiver by NJDEP or the Highlands Council, and will maximize the protection of these sensitive environmental resources (2K5c).

Require that new residential development served by public wastewater collection and treatment systems be at a minimum density of 1/2-acre per dwelling unit for the developed part of the site (i.e., not including

wetlands, open water buffers, and recreational space) to ensure cost-effective utility service.

**Recommendation:** Because the application qualifies for Exemption #17 of the Highlands Act, the extension of public wastewater utility in the Preservation Area is allowed. However, the application is inconsistent with other wastewater policies in the Protection Zone. Specifically, the expansion of public wastewater systems into the Projection Zone is prohibited unless for public health and safety, to serve a redevelopment area, for cluster development, or for minimum practical use of the site.

The residential development apparently meets the requirement that it must be at a minimum density of 1/2-acre per dwelling unit for the developed part of the site (i.e., not including wetlands, open water buffers, and recreational space).

**HISTORIC, ARCHAEOLOGICAL AND SCENIC**

**Presence of Absence of Resources:**

<b>Highlands Historic District Polygons</b>	Absence
<b>Highlands Historic Properties Polygons</b>	Absence
<b>Highlands Historic Property Points</b>	Absence
<b>Archaeological Grids</b>	Absence
<b>Highlands Scenic Resource Inventory</b>	Absence

**Description of Resources:**

**Findings:** Historic, archaeological, and scenic resources are not located onsite.

**Policy Statement:** n/a

**Recommendation:** No recommendation

**CONCLUSIONS AND RECOMMENDATIONS**

The review of the proposed WQMP amendment reveals several major inconsistencies with the Final Draft RMP, primarily the disturbance of steep slopes, Highlands open water protection areas and riparian areas, forests, and critical wildlife habitat. The Highlands Act prohibits the extension of water and wastewater utilities into the Preservation Area (except for exempt development) and stringently limits extension into the Protection Zone. In order to ensure consistency with resource policies of the Final Draft RMP, the applicant should be required to relocate all units from within steep slope areas and the Highlands open water protection areas and riparian areas, and provide mitigation of fragmented forest lands with provision for no net loss of critical wildlife habitat value for the entire site.

The proposed site development is located within prime ground water recharge areas and is located in a subwatershed (Ramapo River (below Crystal Lake bridge) subwatershed) identified as nonattainment for surface water pH and dissolved oxygen. A total phosphorus TMDL has been proposed for this subwatershed. To be consistent with the RMP, development activities should avoid prime ground water recharge areas in the Protection Zone, and if approved should not reduce ground water recharge volumes, and not contribute to water quality degradation. Wastewater discharge to Mountain View STP and on-site stormwater BMPs shall not violate loads associated with impairments within the subwatershed in which the proposed development is located, and for proposed TMDLs for total phosphorus in the Ramapo River (below Crystal Lake bridge) subwatershed.

The site is proposed to be served by public water and wastewater and appears adjacent to the Oxford Water Department service area. The treatment of wastewater by Mountain View Wastewater Treatment Facility in the Township of Wayne has been ordered by the Superior Court of the State of New Jersey.

Extension of utilities in the Protection Zone normally requires a cluster development at the appropriate densities and 80% preservation of natural resource features. However, the exemption of this project from provisions of the Highlands Act nullifies the RMP policy in this case. Reduction of the depletive use to at most the total conditional water availability for the three source subwatersheds, of 27,600 gpd, should be required. Mitigation of the additional depletive water use at 125% should be required.