



Mt. Pisgah Wastewater Treatment Plant Project

April 2006

Environmental Assessment Underway

News from the Superintendent

Friends,

The Blue Ridge Parkway is preparing an environmental assessment of alternative approaches for treating wastewater at the Mt. Pisgah developed area, which includes the Mt. Pisgah Lodge, restaurant, campground, and country store. The existing treatment plant is aging and needs to be replaced or upgraded in order to meet water quality standards, and to provide a modern, efficient wastewater treatment system. The purpose of this newsletter is to solicit input into the alternative ways of achieving this goal.

We want to hear from you so that we can make the most informed decisions concerning the alternatives on this project. We appreciate your input into this process and would like your feedback by May 15, 2006. You are welcome to write to us at the address given on Page 4, but our preference would be for you to provide your comments on the National Park Service Planning, Environment & Public Comment (PEPC) web site. Comments can be made directly online by going to the following link:
<http://parkplanning.nps.gov/documentsAndLinks.cfm?projectId=10423>

Written comments may also be submitted to: Suzette Molling, Blue Ridge Parkway, 199 Hemphill Knob Road, Asheville, NC 28803. It is the practice of the NPS to make all comments, including the names and addresses of respondents who provide the comments, available for public review following the conclusion of the scoping process. Individuals may request that the NPS withhold their name and/or address from public disclosure. If you wish to do this, you must state this prominently at the beginning of your comment. Commentators using the PEPC website can make such a request by checking the box "keep my contact information private." The NPS will honor such requests to the extent allowable by law, but you should be aware that the NPS may still be required to disclose your name and address pursuant to

the Freedom of Information Act. Comments must be postmarked by May 15, 2006

Thank you for your interest in the proposed wastewater plant project.

Sincerely,

Phillip A. Francis, Jr., Superintendent

Background

The existing wastewater treatment plant is located on Mt. Pisgah and treats between 15,000 and 30,000 gallons of wastewater per day, depending on the time of year and number of visitors. The existing plant is an aerated lagoon system that discharges to Flat Laurel Creek. The plant meets all of the required permit discharge limits on a regular basis, but it periodically exceeds ammonia

toxicity levels. The plant is aging and needs to be replaced or upgraded to prevent further problems of this nature and to provide long-term, reliable treatment capability.

This newsletter summarizes the various alternatives that have been considered for the wastewater treatment plant project. As part of this proposal, a preliminary engineering feasibility study, engineering technical memorandums, and an independent evaluation of the feasibility of initial alternatives were first prepared. These studies culminated in the completion of a *Value Analysis (VA) Report - Mini VA* in 2005 that summarized the features of a total of eight preliminary alternatives, that included standard



Existing Wastewater Treatment Plant

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treatment plant options as well as wetland treatment systems. The *Mini VA* included a comparison of the environmental, engineering, costs, and regulatory issues associated with each of the preliminary alternatives. Two of the preliminary alternatives have been carried forward for detailed analysis in the environmental assessment. These are described by letter designation A and B on page 3. A preferred alternative will also be identified in the environmental assessment.

Description of the Alternatives

Eight alternatives were assessed in the *Mini VA*. The main features, and the advantages and disadvantages of each are defined in the table that follows, based on the engineering assessments completed to date.

Internal Scoping

The National Park Service held an internal scoping meeting in November, 2005 to discuss the project and to identify potential issues associated with the eight preliminary alternatives. The following issues were identified:

Improved quality of treated wastewater.

Potential effects of construction on a small wetland located within the existing plant site.

Potential effects of construction on cultural resources.

Potential effects of construction on special status species.

Potential effects of soil disturbance and soil erosion resulting from grading and/or filling of the lagoon during construction (if necessary).

Potential spreading of nuisance plant seeds (especially bitter-sweet, *Celastrus orbiculatus*) in fill dirt brought onto the site from other areas.

Ammonia toxicity issues in the receiving stream.

Potential effects of temperature of the discharge on trout in the receiving stream.

Potential effects of construction and operation on air quality.



The wastewater treatment plant serves the restaurant, country store, employee housing area, campground, picnic area, and a recreational vehicle waste disposal facility

DESCRIPTION OF ALTERNATIVES FOR THE MT. PISGAH WASTEWATER TREATMENT PROJECT

Letter Designation	Treatment Alternative Description	Advantages and Disadvantages
O	Maintain existing aerated lagoon operation (no action)	Implementation would result in continued risk of failing ammonia toxicity test; permit violations would be expected to occur; plant effluent quality would not be enhanced.
A	Maintain existing aerated lagoon treatment; upgrade existing facility to increase solids removal frequency from lagoon; provide onsite solids storage location	Capital and life-cycle costs for Alternative A and Alternative B are similar (low cost). Continued potential whole effluent toxicity test excursions and lagoon safety concerns. Continued maintenance concerns about aging system.
B	Replace the lagoon with an extended aeration package treatment plant system	Effluent quality would be the same or slightly better than the existing facility; low cost, high degree of reliability, and a compact footprint. Capital and life-cycle costs for Alternative A and Alternative B are similar. Effluent would be the same quality or slightly better than the existing system. Plant operator is experienced with the existing system. Fewer maintenance concerns as compared with Alternative A. Proven technology would be employed, therefore, permitting process should be simplified.
C	Install polishing constructed wetlands downstream of the lagoon	The lagoon must remain in operation and effluent quality improvement would be limited. Effluent would flow in and out of the wetland via gravity, so no additional mechanical or electrical components would be required. However, does not achieve project objectives for the capital required.
D	Replace the lagoon with a recirculating sand filtration system	The lagoon area would be utilized for the filters, recirculation and septic tanks. Limited filter construction period due to the need to utilize the aerated lagoon area. Earthwork would be significant. Capital costs exceed available funding.
E	Replace the lagoon with a membrane bioreactor package treatment system	Capital and life cycle costs funding are higher than Alternatives A and B, but provides superior effluent quality.
F	Replace the lagoon with a membrane bioreactor package treatment system and ultraviolet disinfection	Capital costs exceed available funding. Elimination of chlorine discharge to the environment and elimination of chlorination/ de-chlorination chemicals on site.
G	Replace the lagoon with a sequencing batch reactor treatment system	Effluent quality would potentially be very similar to the existing aerated lagoon system. Sidewater depth requirements are very high which would create an excessive amount of costly excavation; capital costs would exceed available funding.
H	Replace the lagoon with an Orenco Advantex filtration system	Proprietary filter media causes concerns regarding future filter media replacement requirements.



National Park Service
U.S. Department of the Interior

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199 Hemphill Knob Road
Asheville, NC 28803-8686.

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Next Steps

A preferred alternative will be selected and its effects on the human and natural environment will be identified and analyzed. Comments on the preliminary alternatives will be incorporated into the environmental assessment. All comments will be included as part of the formal public record maintained by the National Park Service.

The National Park Service appreciates your input into this planning process and would like your feedback. We request that you provide your comments electronically, or by mail using the following contact information:

Comments? Write to:

National Park Service

Blue Ridge Parkway
Attn: Suzette Molling
Mt. Pisgah Wastewater Treatment Plant Comments
199 Hemphill Knob Road
Asheville, North Carolina 28803-8686

You may also enter comments directly through the Internet by directing your web browser to the following URL address:

<http://parkplanning.nps.gov/documentsAndLinks.cfm?projectId=10423>