MEMORANDUM

To:

Coleen Sullins

From:

S. Jay Zimmerman - Hearing Officer

John Hennessy – Hearing Officer

Subject: Hearing Officer's Report

The Cliffs at High Carolina 401 Certification

It is the recommendation of the hearing officers that the project be granted the 410 Certification. This recommendation is based on the our review of the hearing record, including comments received prior to the close of the hearing record, discussions with the applicant and with Cyndi Karoly of the DWQ 401/Wetlands Unit. Specific stipulations are provided below and we recommend they be included in the 401 Certification letter issued to the applicant.

INTRODUCTION

Notice was given that Mr. Don Nickell and The Cliffs Communities - High Carolina had applied to the North Carolina Division of Water Quality for a Water Quality Certification pursuant to Section 401 of the Federal Clean Water Act and Water Quality Commission rules in 15A NCAC 2B .0101, 15A NCAC 2B .0231 and 15A NCAC 2H .0500. The residential development includes a proposed championship 18-hole golf course, which is to be constructed on approximately 2,980 acres of land, located adjacent to Highway I-40, Exit 55 in Buncombe County.

The initial submittal as described in the U.S. Army Corps of Engineers' Public Notice on July 3, 2008 for this Certification included proposed impacts to 6,149 linear feet of stream channel, 0.219 acre of 404 jurisdictional wetlands, and 0.03 acre of open water in order to construct a golf course and residential development on the 2,980 acre tract of land known as The Cliffs at High Carolina. Subsequent submittals resulted in a reduction of the proposed stream impacts. The final proposed impacts are as follows:

- 4,207 linear feet of stream channel
- 0.223 acres of 404 jurisdictional wetlands
- 0.03 acres of open water

Within the boundaries of the 2,980-acre development, surface water features prior to the proposed impacts include 99,770 linear feet of streams, 1.47 acres of wetlands, and 6.4 acres of open water.

SUMMARY OF HEARING

At your request, I served as the Division of Water Quality's hearing officer, along with Mr. John Hennessy as co-hearing officer, to obtain public comments related to the proposed residential and golf course development and the 401 Certification. The hearing was conducted on Tuesday November 18, 2008, at 6:30 pm in the Reynolds High School, in Asheville, NC. At the public hearing 137 people registered their attendance during which 45 people made comments. The hearing was held as a result of comments received from the public citing the following basic concerns:

- Concerned about the filling of streams and wetlands and sedimentation issues related to development of the project.
- 2. Concerns related to the impacts to native Brook Trout and other species within the streams on the project property and downstream.
- 3. Concerns related to the withdrawal of groundwater and the impact to existing resources.
- 4. Concern related to chemicals used on the golf course and the potential for impacts to water resources.
- 5. Other issues expressed included wildlife populations and cultural impacts related to population growth. However, general concerns unrelated to water quality were not taken into consideration in this analysis since they do not fall under the jurisdiction of the Division of Water Quality.

Attached for your information is a copy of the public notice (see Appendix A). Ms. Cyndi Karoly of the Wetlands/401 Certification Unit provided staff support and prepared the hearing record. Ms. Karoly also presented the Division's overview of the project and 401 Certification administrative processes during the public hearing and prior to acceptance of public comments.

The attendees' comments can be grouped into 3 categories – those opposed to the development; those supportive of the development; and, those that have reservations concerning the development depending upon the extent of the Division's 401Certification requirements. A summary of the oral public comments received at the public hearing is located in Appendix B. In addition to the oral comments, 15 written comments were submitted and are located in Appendix C. Although the Division received more than 18 written comments, some of the comments were duplicates sent to both hearing officers and Cindy Karoly and are, therefore, not included in this Appendix. Additional written comments were received after the close of the hearing record at 5:00 p.m. on December 18, 2008, and were not considered.

A number of attendees presenting oral comments expressed various concerns related to the project and recommended the Certification be either denied or tabled to allow for collection of additional information. These comments are located in Appendix B and are summarized as follows:

- Concerns regarding impacts associated with sedimentation and erosion, flooding, reduced tree canopy and the burying of stream segments, and cumulative impacts,
- Concerns associated with the depletion of groundwater related to the irrigation of the development and more importantly the golf course,
- Concerns regarding the use of chemicals such as fertilizers, pesticides and herbicides on the
 golf course and the impacts to groundwater and surface water resources as well as native trout
 populations,
- Concerns that the mitigation efforts should be conducted within this watershed and not an
 adjacent county,
- Concerns regarding the loss of habitat and its impact on local wildlife

Written comments that were received included comments similar to those made at the public hearing. Additional concerns were expressed regarding the use of the 30-foot trout buffer as part of the mitigation calculation and concerns related to the appropriate monitoring for impacts to water resources. Comments in support of the proposed development suggest the project will bring much needed revenue to the area, cited the excellent track record of the applicant and indicated development of the project will bring much needed jobs to the area. Several commentors requested that an Environmental Assessment (EA) or Environmental Impact Statement (EIS) be prepared for this project; however, the Division of Water Quality is not able to require one to be prepared. Under the North Carolina State Environmental Policy Act of 1971 (G.S. 113A, Article 1), an environmental document (such as an EA or EIS) can only be required if public monies or private use of public land is involved. There are no public monies or public lands involved in the Cliffs at High Carolina project; therefore, a SEPA document cannot be triggered.

Subsequent to the hearing we met with the applicant on January 9, 2009, during which time they were requested to provide more information that we felt was needed to address the public's concerns as well as those of staff and the hearing officers. Specifically the applicant was requested in a letter dated January 16, 2009, to address the following:

- Temporary impacts associated with construction activities
- Downstream protection measures
- Pond management and irrigation activities to ensure maintenance of existing uses
- Cumulative impact analysis associated with anticipated economic growth

- Justification concerning grading and filling activities associated with 10 of the 18 golf course holes/fairways
- Onsite and offsite mitigation activities
- Concerns related to the potential for impacts to surface water quality as well as groundwater
 quality and quantity, including the identification of potential high risk areas where impacts to
 groundwater or surface waters was possible as a result of, or due to construction of the
 course.

On April 30, 2009 the Division received a report titled, "DWQ Response to Request for More Information", which included the applicants response to our request. A meeting was held between the applicant and their representative and Division staff on May 12, 2009 to discuss the information. At the time of the meeting, additional information related to the cumulative impacts analysis was submitted to supplement the report received April 30, 2009.

The Water Quality Certification Rules applicable to this project are located in 15A NCAC 02H .0500. The Hearing Officers have met with DWQ staff and the applicant at the development site and in Raleigh, and have discussed the project with representatives of the U.S. Army Corps of Engineers and North Carolina Wildlife Resources Commission. We have reviewed the application, maps, reports, the hearing record including comments submitted by the public and new plan submittals by the applicant. After a review of the pertinent information, and after consultation with Hearing Officer John Hennessy and Cyndi Karoly, I have made the following observations and recommendations to assist you and the staff of the 401 Oversight and Express Permits Unit in your decisions related to the issuance of the 401 Water Quality Certification.

DISCUSSION

After considering the application and supporting materials as well as the oral and written comments, the hearing officers have summarized their observations and comments based on 15A NCAC 02H .0506, the criteria for certification, as follows:

(1). No Practical Alternative, considering changes in design and a potential for reduction in size, the basic purpose cannot practically be accomplished to avoid less adverse impact to surface waters or wetlands.

North Carolina Administrative Code Section: 15A NCAC 2H .0500 outlines the review procedures for activities requiring Water Quality Certifications pursuant to Section 401 of the Clean Water Act (33

U.S.C. 1344). CWA Section 401(a)(1) states that "Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this title..." The application for 401 Certification for the Cliffs at High Carolina project was triggered by an application for an Individual 404 Permit administered by the US Army Corps of Engineers.

By issuing a 401 Certification, the State is certifying its determination that existing uses will not be removed or degraded by a discharge to classified surface waters for an activity which has no practical alternatives [15A NCAC 2H .0506(b)(1)]. A lack of practical alternatives may be shown by demonstrating that, considering the potential for a reduction in size, configuration or density the proposed activity and all alternative designs the basic project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters or wetlands [15A NCAC 2H .0506(f)].

Section 15A NCAC 2H .0506(i) states that "The Director shall not duplicate the site-specific application of any guidelines employed by the United States Army Corps of Engineers in evaluating permit applications under 33 U.S.C 1344 and applicable federal regulations." Therefore, DWQ is reliant upon the Corps to establish an acceptable project purpose and need, as well as many aspects of impact minimization through the alternatives analysis, since the Corps is already pursuing these issues through the 404 Permit review process.

In such cases where the Corps has concurred that impacts within streams, wetlands and waters associated with a project are justified, DWQ proceeds with review of the application for 401 Certification. Proposed projects meeting Section 404(b)(1) Guidelines as determined by the Corps will be considered for 401 Certification within the context of water quality concerns.

(2). Minimizes adverse impacts to surface waters by showing support for existing uses after project completion.

Conditions may be applied to 401 Certifications in accordance with 15A NCAC 2H .0507(c). In addition to construction and mitigation issues, such conditions may include long-term operation and maintenance

agreements, along with remediation measures should it be determined that water quality standards are not being met in the future. Certifications include a chain of custody and responsibility for the 401 Certification if the property is sold. This could include a specific requirement for financial assurances where engineered facilities built by a party intending to turn the project over to another entity (such as a homeowners' association) following project construction. These financial assurances would need to ensure that expenses incurred by amelioration efforts associated with water quality impacts would be paid for by the owner(s) of the facilities. These assurances would also need to provide for a responsible party in the event of unforeseen circumstances, such as dissolution of a homeowners' association. Deed notification requirements are typically included in Certifications, noting that potential future buyers are advised of the existence and location of aquatic resources on lots.

(3) The project does not result in the degradation of groundwaters or surface waters.

A number of comments were received at the hearing and in subsequent written comments regarding impacts to the surface water and groundwater resources. These concerns included impacts due to sediment and erosion that occurs during and subsequent to construction, the depletion of groundwater due to assumptions that it would be used for irrigation of the golf course and surrounding properties, as well as concerns related to impacts associated with the application of pesticides, herbicides and fertilizers which may pose a risk to groundwater and surface water resources.

Concerns related to sediment and erosion included those related to both pre and post construction activities as well as concerns related to the increased potential for storm water runoff as a result of the removal of the forest and increased impervious surfaces. Efforts to prevent and minimize the effects of sedimentations and erosion have been proposed by the applicant and coordinated between the DWQ and the Division of Land Resources.

A geological and hydrogeological evaluation of the subsurface conditions at the site was included as part of the response to additional information received April 30, 2009. The report included a survey of existing well owners and surrounding property ownership which included a map identifying property owners that might own a well within 1000 feet of the property boundary, a detailed assessment of the subsurface geology, an evaluation of the potential for impacts to surface and groundwater associated with the use of various chemicals common to golf courses, the identification of areas where the groundwater or surface waters were at a higher risk of impacts and factors controlling the risk, and a list of chemicals proposed to be used at the golf course. Where risk to the groundwater or surface water was elevated due to geological

or hydrogeological factors, the applicant recommended specific mitigation measures to be employed to reduce the risk.

After completing the review of the information, it is not believed that groundwater supplies and private water supply wells will be affected as a result of the project. The distances between recharge and discharge areas are relatively small. High ridges and steep draws characterize the hydrogeological conditions at the site, with groundwater discharging into area streams. The effects on neighboring wells are expected to be negligible given the long distances between area wells and the projects property boundaries. The proposed project will not include the installation of wells for the purpose of irrigation or any other purpose. The source of water proposed for use to irrigate the golf course and surrounding grounds will be from the large pond on the property and from water collected in cisterns located throughout the development. Municipal water will be supplied to the development, for use by the residents for domestic purposes. There will be a net increase in the amount of recharge to the groundwater since the treated wastewater will initially be applied to drip fields located on site. The Division issued a Nondischarge Permit # WQ0033455, for treatment and disposal of wastewater from the development. Plans are to eventually expand the irrigation to the golf course through the use of reclaimed wastewater for irrigation purposes at a later phase.

Ten (10) areas of higher risk were identified in the geological/hydrogeological assessment report and specific measures were recommended by the applicant to be implemented in order to minimize the potential for impacts to surface and groundwater. The application of the chemicals will be closely monitored by golf course staff and are consistent with rates recommended by turf specialists at local universities. The applications will be conducted in a manner to minimize the chance for impacts, including but not limited to no application within 12 hours of an anticipated rain event and the use of pesticides with low active ingredient application rates. Additional measures that may protect the groundwater in areas of higher risk include installation of the under drain systems, the compacting of soil above shallow bedrock and or the over excavation of shallow bedrock followed by installation of compacted fill.

The proposed project will result in an increase in the impervious area associated with road improvements and the construction of homes, golf course amenities, and parking areas. Storm water control structures will be used to manage the flow of water during storm events. The golf course will be constructed with a subsurface drainage system throughout the tee boxes, fairways and greens. Additional storm water as well

as water used for irrigation of the golf course will be collected by the drainage system and diverted to storm water "stilling" basins.

Risks to surface water associated with sedimentation and erosion that occurs during and after construction activities will be managed by appropriate sedimentation and erosion control measures. Risks to groundwater and surface water quality associated with the use of various chemicals such as fertilizer, pesticides and herbicides appear to be minimal. There is a remote possibility of impacts to surface water associated with storm water runoff and the movement of water through the course turf, into the subsurface drainage system and into the surface waters via the stilling basins.

Although the project is not expected to affect groundwater quantity or to violate groundwater quality standards or surface water quality standards for Class C or Class C Trout classified surface waters, the applicant should be required to monitor surface waters for impacts associated with the chemicals used at the site at specified locations. This recommendation is to monitor for the potential for stormwater runoff and water collected by the subsurface drainage system to affect the water resources. Provisions for additional monitoring and corrective actions should be required at the discretion of the Asheville Regional Office should any monitoring determine impacts have occurred.

The applicant should design grading, sediment and erosion control structures, and schedule earth-moving activities in a manner to avoid sedimentation and erosion of soil and employ protection strategies for the continued success of downstream trout waters. The applicant should demonstrate compliance with turbidity standards at the downstream juncture of classified trout waters and include appropriate upstream comparisons during construction phases of the entire project.

(4) The project should not result in cumulative impacts that cause downstream violation of water quality standards.

Contractor - Wetland and Natural Resource Consultants, Inc. prepared a qualitative analysis to address the cumulative and secondary effects of the project. This qualitative analysis was prepared in accordance with the Division's Cumulative Impacts and the 401 Water Quality Certification and Isolated Wetland Program (Version 1.6, October 3, 2002). The analysis contains a good description of the pre- and post-project conditions within the project vicinity. The project is not expected to violate Class C or Class C Trout numerical water quality standards downstream if measures are taken to avoid sedimentation concerns. The applicant should design grading, sediment and erosion control structures, and schedule earth-moving activities for the continued success of downstream trout waters. An important factor in

considering any cumulative impact analysis is the ability of the local municipality to implement and oversee stormwater and sediment and erosion control programs. Buncombe County has an active delegated state stormwater program that meets state standards. The applicant shall be required to provide a copy of the stormwater plan when it is approved by Buncombe County.

(5). <u>Provides for protection of downstream water quality standards through the use of on-site stormwater control measures.</u>

A stormwater management plan should be a condition of the 401Certification. This plan may be approved by DWQ staff or by Buncombe County, since the county has a delegated stormwater management program certified by DWQ to meet state standards.

(6). The project provides for replacement of existing uses through stream mitigation under USACOE and DWQ requirements. Mitigation shall not be required for impacts to wetlands less than one acre. Stream mitigation shall provide a minimum of a 1:1 ratio.

The applicant has the ability to meet mitigation requirements through a combination of on-site and offsite options. The plans, construction, and monitoring details should be agreed upon in cooperation with the USACOE, DWQ and the applicant prior to issuance of the 401 Certification. Provisions of the 401 should ensure the long-term management and maintenance of the mitigation functions.

RECOMMENDATIONS

A number of recommendations are made for your consideration. We recommend specific conditions to be included in the 401 Certification.

- 1.) Implementation of Sediment Erosion Control Plans and Strategies
- 2.) Inclusion of General Construction issues such as no wet concrete in streams
- 3.) Implementation of Wetland and Buffer Conservation Deed Restrictions or other conservation management strategy
- 4.) 401 re-opener clause if water quality standards happen to be violated
- 5.) An acceptable Stormwater Management Plan with specifications and performance information
- 6.) A jointly approved USACOE and DWQ Stream Mitigation Plan that will provide replacement of lost functions and values, and ensure long-term success and stability
- 7.) Certificate of Completion

- 8.) Culvert installation methods, maintenance and monitoring to ensure long-term upstream and downstream physical stability and protection of biological communities
- 9.) Design Standards for Sensitive Watersheds
- 10.) Trout Moratorium to protect trout populations during spawning
- 11.) Monitoring of surface water at specific locations for impacts associated with fertilizers, pesticides and herbicides.

APPENDIX A

Public Notice of Hearing
The Cliffs at High Carolina

PUBLIC HEARING THE CLIFFS AT HIGH CAROLINA

NORTH CAROLINA DIVISION OF WATER QUALITY

PUBLIC NOTICE is hereby given that Mr. Don Nickell and The Cliffs Communities - High Carolina have applied to the North Carolina Division of Water Quality for a Water Quality Certification pursuant to Section 401 of the Federal Clean Water Act and Water Quality Commission rules in 15A NCAC 2B .0101, 15A NCAC 2B .0231 and 15A NCAC 2H .0500.

The activity for this Certification is sought to impact 6,149 linear feet of stream channel, 0.219 acre of wetlands, and 0.03 acre of open water in order to construct a golf course and residential development on a 2,780 acre tract of land known as The Cliffs at High Carolina in Buncombe County, North Carolina.

The public is hereby notified that that the Division of Water Quality will hold a public hearing on Tuesday, November 18, 2008 starting promptly at 6:30 p.m. at A.C. Reynolds High School, 1 Rocket Drive, Reynolds, North Carolina, 28803. Doors will be open starting at 6:00 p.m. for seating and registration to speak.

The public is invited to comment in writing on the above-mentioned application as well as during the Public Hearing. Speaking times will be determined on the day of the hearing depending upon the number of speaking slots requested. Those wanting to speak need to register at the hearing and speaking sequence will be in the order of registration. Written comments may be forwarded at any time before or after the hearing provided they are received by the Division by regular mail, fax or email no later than close of business (5:00 p.m.) on Thursday, December 18, 2008.

Comments should be sent to the N.C. Division of Water Quality, 401 Oversight Unit, 1650 Mail Service Center, Raleigh, NC, 27699-1650, Attn: Cyndi Karoly (919-733-1721, FAX: 919-733-6893, Cyndi.Karoly@ncmail.net). Comments may also be mailed to the physical address of the 401 Oversight Unit at 2321 Crabtree Blvd. Suite 250, Raleigh, NC, 27604-2260.

Copies of the 401 application materials are on file at the DWQ Asheville Regional Office at 2090 U.S. Highway 70, Swannanoa, NC, 28778 (Asheville Regional Office phone 828-296-4500) as well as the Raleigh Central Office location listed above during normal business hours (8:00 a.m. to 5:00 p.m.) and may be inspected by the public. File materials may not be removed from any DWQ office, as copy machines are available.

Coleen H. Sullins Director N.C. Division of Water Quality

Date: October 16, 2008

APPENDIX B

Summary of Oral Public Comments
The Cliffs at High Carolina

Speakers are listed in order of appearance:

Coleman Smith: I live in Arden and I grew up in North Carolina and I appreciate this area. I don't think the project overall is like necessary. I think too many projects like this have been shown to degrade. I think it is cutting up our community and having social and economic impacts. I don't think that the people who have lived here or make a living here are the ones who really benefit from this project. But more specifically to the water quality issues, there are others that are lined up to speak more in detail about the fact that the golf course is just a community by itself and it is creating like a huge source of pollution to begin with, if not done well. The mitigation in the permit is inadequate. You can not double up and double dib and use a legal requirement of a buffer to a trout stream as part of the mitigation. That has to be reconsidered. The destruction of trout streams are just verboten anyway in the state so we're going to destroy a trout stream or we are going to bury pipes and have these rare blind albino trout go underground. The questions that I really want to ask and would like to have some responses are has there been accumulative impacts study state or Federal? If not required, why not? If it was to be required, what would trigger such a study? The cumulative impact takes everything under consideration. You can't separate out one little item and say its ok and the rest of them have to be worked on. To my understanding, the purpose of the Clean Water Act is to stop ongoing pollution, not to create pollution that can occur in a project like this such as chemical pollution, sediment, flooding, landslides, and loss of tree cover. It's all a certain type of pollution. So the purpose of the Clean Water Act is to in state is to stop ongoing pollution giving considerance to existing social, economic and political conditions begin to reverse the pollution by working backwards. This does not mean establish what the buffer, how much margin there is between what we've got as pollution and what the regulations allow us to have as pollution and then fill it in so that we are still underneath the regulations. The purpose of the Clean Water Act was written to halt the ongoing pollution, to reverse it considering social, economic and political conditions and work toward zero discharge for both point and nonpoint source pollution. So basically the only questions that I would really like to know is at what point is there to be accumulative impact study of this entire project where water in your case is concerned.

BJ Snow: I am here representing Mountain Voices Alliance. We would see the Department of Water Quality permit for the cliffs and how North Carolina denied. We are deeply concerned that if this permit is granted, area streams will be impacted by runoff and fertilizers, pesticides and herbasized which are used to maintain the golf course. In addition waterways will be negatively impacted by increased sedimentation during construction and storms that will monitor water quality in the area. The Cliffs, DWQ, when will it be monitored before, during and after construction and for how long into the future? If this permit is granted, there will be increased risks from flooding from rain. By constricting the stream flow with coverts, they will reduce the ability of the stream channels to accept increased rain creating the very real possibility of streams and waterways overflowing their banks more frequently. If this permit is granted there will be an increase likelihood of impacts from changes to the groundwater hydrology. This could affect area wells and stream flows following saturated soil conditions and extreme storms there would be an increased risk of landslides in areas of unconsolidated soils and rock substreds. These slides have already happened in parts of Western North Carolina and could easily happen again anywhere at any time and the loss of tree canopy as a result of the development. Golf course activities conducted to date at the Cliffs has already impacted aquatic resources with respect to precipitation and runoff. If this permit is granted these impacts will be magnified for each of the above issues. Based on these issues and the potential impact to our environment and the community, Mountain Voices Alliance stands on record against granting this permit for the Cliffs at High Carolina.

Mark Baucom: I am president of Hickory Construction Company. I just want to represent my company and say that I understand that this is a very environmentally sensitive to the folks here. As the president of our company, we did approximately \$40 million dollars worth of construction work at the Cliffs at Walnut Cove which most of you are familiar with. We probably did construction over the course of a 3 year period. All the folks that we work with at the Cliffs who were numerous were very, very environmentally sensitive to the issues that we encountered during construction whether it was runoff and we had to have the proper silk fences up. Bud Mathis sat through several meetings where there was maybe mud on the street and they were asking for water trucks to make sure that we took care of that issue from buffer zone existing trees. From my 3 years experience at our company I just want to say they were extremely environmentally conscience and we had numerous inspections from various people during the course of it. Any issues that needed to be rectified were brought up timely and we rectified it. They were very sensitive to that.

Kirby Harris: I am Kirby Harris with Harris Stone. I'd like to start in saying the Cliffs went far and beyond with a planning and I have personally seen over a thousand planted back that includes oaks and blue berries and evergreens. I'd like to also say there have been a lot of projects that have been in Western North Carolina that met great controversy. In 1909 there was a plan to start a vast project and that was the Blue Ridge Parkway that brought a lot of jobs during the great depression. The other project in the late 60s and the early 70s was I-40 that brought great controversy. I've worked with the Cliffs for 5 years. They have regular inspections on all of the silk fences, dams. I have worked in construction all my life and the Cliffs is one of the best green friendly builders and developers that I have ever worked with. They do very good quality work.

Bill Boyd: I live in Alpine Mountain. Alpine Mountain is about a 300 acre community just on the north side of the Cliffs proposed development in High North Carolina. We represent approximately 60 owners. We have two primary concerns. One is the streams and the affects of groundwater depleting our wells. All of our homes are supported by wells are we are definitely concerned about the golf course and the amount of water that it may take. I am aware of statements by Mr. Anthony saying that he is not going to do any depletion of the groundwater; however in that regard there are a number of residents within the Alpine Mountain Development who are going to be doing groundwater monitoring. We have set up electronic devices where we can monitor our groundwater and see the affects of any depletion of the groundwater caused by the Cliffs. But it all gets down trusting in a way. Do we trust developers and do we trust Mr. Anthony to do what he says he is going to do. My background is that I am from Southern California and I spent 20 years as a civil engineering consultant working with development projects. During that time I would say that 90% of developers, I would not trust. They say one thing and they do something else. It is all about bottom line dollars to them. I hope Mr. Anthony is not that kind of developer. If he does what he says that he is going to do and not deplete our groundwater or affect our streams?

Mike Freyer: The Clean Water Act is good. We live at Fairview. I'd like to know how many people in this audience that this is going to bother from Swannanoa to Fairview. He asked that these people and all those that own property that it was going to bother to raise their hands. Those are the ones that need to be speaking about this issue. I live close to a stream and we do have a pond. I am interested in clean water. We have a stream surrounded by South Cliffs that are building at the present time and it has not bothered our stream. We have golf courses all over town so I guess we need to close them all. There are too many people coming to the area trying to change the way that the people in Fairview and other areas have lived for years. I have been here for 44 years. We don't need that. The people that need to talk to these people from Raleigh are the people that are local right in the area that it is going to interfere their wells. People that have wells in the areas like the gentlemen are talking about and I am pretty sure that you have a septic tank. There is a separation and land will overtake chemicals as it comes in. It is not going to be anything that is going to bother your property. Because the way they have things now, it just doesn't. We have a lake and we have the landscape treated around it and it does not bother the water quality. So everybody needs to talk to the people that understand water and I assure Mr. Anthony that this is a big project and it is a lot of money in it and it will bring revenue to Buncombe County. I am sure that he is not going to try and do something that is going to hurt things but other than that we have too many people coming to the area trying to make decisions for our area that we have had here for 44 years. That needs to stop.

Jake Salt: I like to say thank you to Mr. Freyer for the idea of people who are directly affected by the proposed permit. I would like to expand that definition of who will be affected by it or to anybody that comes near the water is going to be affected by the golf course, water that will be buried if this is permitted. I think as well as folks that have lived here for a very long time which obviously have valid opinions, and also people that are here now and will continue to be here in the future such as myself. If this permit is granted we are one step closer to the golf course going in and the golf course being maintained in a high level of uh............. What I am trying to say is Tiger Wood's golf course is going to take a lot more chemicals and a lot more maintenance than golf courses that say I've worked on in the past, one that have taken a lot less people and have lot less famous names on them. When I worked on golf courses we had nitrogen, phosphorous, things that look like methyl ethyl, (you add the rest). Things that are going to go into water downstream and this is less about burying trout stream and more about if this goes through and what kind of things we can expect to see in the future. Not all those things are going to look like sediment or look like pollution that is obvious but things that go into the water. I think that Cliffs has refused to say or even say what kind of chemicals they are going to be putting on the golf course. I am not sure why but it scares me. So I think that something that we need to consider is not just the sediments but also the chemicals that are proposed for in the future that we are not going to have any say in. I swim in a few rivers that aren't designated Class B. I think that if we could reflect ourselves right now of how we interact with the water around us. So think

about if you have ever swam in rivers that are downstream of where the golf courses propose to be, if your kids have ever swam in rivers or might swim in rivers downstream from where this golf course is proposed to be, if your friends kids. They are going to be affected by things that we can't see. Chemicals at the Cliff are even refusing to disclose and that to me seems completely dishonest.

Gordon Myers: I live in Fairview and I have a stream on my property. I had questions about the Cliff just like everyone who are here tonight. Instead of asking questions and speculating about what was coming I went and looked for myself. I've been at the Cliffs valley, the Cliffs at Walnut Cove and a month ago I went up on the mountain with a group of individuals that looked at the Cliffs at High Carolina. In addition to my interest as being a resident of Fairview, I'm retired and I have worked 15 years with Angles Market and developed over 100 properties. I was on the DOT Board for nine years and very much involved in road construction and the implementation of the building of I-26. So I am no stranger to water quality and what it takes to maintain the pristine and the water in the areas that we have in western North Carolina. In looking at the projects that the Cliffs had done, I would tell all of you this is not their first walk around the block. This is the seventh or eight project that they have done. I think if you look at what they have done in their track record it shows you what they will do here in Asheville. North Carolina. In looking at the erosion control measures, and the other projects that they have implemented at their projects around western North Carolina, they have either met or far exceeded any requirements that I've ever seen relating to water quality issues. So as a resident of Fairview I see no problem with the project that they are doing. I think that they are taking the correct and necessary measures to ensure everyone's water quality. I think that a lot of questions that you have the Cliffs have already thought of this because again they've done these projects before. I think that they have answers to most if not all of the questions that you have here this evening. Thank you.

Bob Gunn: I live at Black Mountain and I spent most of working career in the industrial chemical industry. I managed the water treating business or a rather large oil and gas and chemical corporation. I was deeply involved in industrial water and waste treatment during the large part of my career. I don't have any presentation to make or a PowerPoint or anything like that. My presentation is too simply to refer this audience to the May 2008 issue of Golf Digest Magazine. It has a picture of a gentleman name Tiger Woods on it. I have never met Tiger Woods and I don't expect that I ever will. I have met Jim Anthony and sat in a meeting with him. He is a very good salesman, very charming. This issue of Golf Digest Magazine devoted a section to the impact on our ecology of golf courses. In January 1995 eighty-one people met at Pebble Beach Golf Course on the coast of California. I will not try to go into all the details of this article but one of the headline comments is "By 2025 less than 17 years from tonight about 1.8 billion people will be living in conditions of absolute water scarcity. Another comment was from this August meeting in Pebble Beach of 1995 says "The residues of synthetic chemicals are found in high concentrations as far away as the Arctic." Those residues do not arrive there by truck. They arrive in the water and that is my great concern that we will all be impacted by what's going on up here between Fairview and Swannanoa.

Eugene Ellison: I would like to applaud the Swannanoa Park Community Coalition and the neighbors of Fairview and Swannanoa for their concerns to Jim Anthony. What I'd like to say is this is the eighth project of the Cliffs and they have an excellent on environmental issues. Water runoff, erosion control, landscape improvements, plans include individual cisterns at home sites to collect water and redistribute after treatment sensitive to make up of all fertilizers and chemicals used for road maintenance. They have a proven track record of developing first class projects in our region. The mere fact that Tiger Woods is putting his name on this is his first golf course designed in North America proves that Jim Anthony and the Cliffs have already passed one of the most stringent tests that they will ever encounter. As the world, the nation and you watch they will be challenged to do the very best to make the water quality safe.

Teddy Gurlock (speaking for Ian Higgins): I am a student going to Wilson College of Swannanoa and me about to move into a house in Swannanoa. So I have slightly more of a commitment to being in this area that being here for four years and then leaving. As far as everything that has been said about construction, the silk fences and the hay bales and everything going into erosion management. I don't know that much but does a standardized method that may work in flat land areas and areas in the Piedmont in North Carolina but this is going up on the side of a mountain and I don't know how much that is going to affect that area. Also, they mentioned about this bringing in revenue. Being in Swannanoa for the past few years I want to know, the Beacon Plant was supposed to bring in revenue. It came in from outside and then closed down, left and moved south of the border. What ensures that the Cliffs here are going keep and sustain jobs in the area forever, instead of leaving the community where it left off.

The Cliffs hasn't built an entire golf course on top of a mountain before, with chemicals going into ground. I don't feel comfortable with a golf course above me with chemicals going into the ground.

Alan Nesbitt Live on Nesbitt's Old Farm Road, adjacent to Cliffs entrance. Stream on my property goes into Cliffs. I saw the construction process for the bridge crossing at the entrance, and they were careful with nets and silt screens. I believe they will do everything they can to construct in an environmentally friendly way.

Francois Manavit I live downstream from Mr. Nesbitt. DWQ can't give authorization to destroy trout streams, mitigation is inadequate and should be done locally in Fairview. Existing streams should not be used as mitigation. Topography, high plateau, stream starters creeks, it's a watershed environment. Gravity will affect chemicals placed on golf course and affect residents downstream. DWQ should require the City of Asheville to complete a full Environmental Impact Statement even if integrated pest management is planned. 100% participation in the "Audubon Program" (translation?) should be recommended. 401 should be denied or delayed, or the Cliffs should be invited to return with practical alternatives that minimize impacts. Or they could sign an agreement with the locals with commitments to bring back trust in the process. Chemicals, pesticides, fungicides are a concern for my water. Have them create an organic golf course. Data should be optimized when toxicologists and turf grass scientists collaborate on analysis. Who is in charge — Fairview or these guys involved in a real estate deal. Our commissioners should ask tougher questions. Growing market for organic golf. Hear our call as to why you chose an environmentally friendly county for your project. Conferred with scientists at Clemson University.

Jennifer Taylor Lived in Alpine Mtn sd for 11 years. 200 acrs of former 500-acre Alpine Mtn sd purchased by Cliffs, will be gated from surrounding neighborhood. Spring 2007 deforestation began for 30 miles of roads. We are living with smell of debris, noise of blasting, hear booms and our homes shake, feels like an earthquake. Raises questions of what it's doing to the watershed – is it changing pathways? Our only source of water for homes is well water. Neighbors experienced well level differences from 300 to 500 feet within days of measuring, and well had to be replaced prematurely. Aware of 3 other neighbors with wells going dry, and I had to buy a new well pump. Water vital to livability of homes. Burning, erosion and trust. Cliffs bought a house and allowed the fire dept to use it for training. I called fire dept and they assured me the Cliffs were monitoring it. I was there an hour and nobody from the Cliffs came. Fire is a scary thing in the forest. How can we feel safe to trust the Cliffs to do the right thing because they say they will. They also removed the silt fence from the asphalt driveway and erosion resulted. They fixed the problem but there never should have been that problem. Are we who live below it safe. Why would the Cliffs want to move streams? These are serious concerns.

Katherine Cross Resident of Alpine Mtn. Similar concerns to Jennifers. Primary concern is lack of understanding of Public Notice, what it means, what impacts will be. If anybody does know, could they tell us? Clarify it so we can deal with real problems and dispose with those that are not real problems. Comment directed to agencies. Process is not informative and may alarm people because you don't know what's going on. 300-page application is not informative, don't know what all that information says. Need public notice with lay person's interpretation of figures and numbers. GW supply is biggest concern. Wells, will be installing monitoring wells, that measure damage but don't prevent it. Support EIS with baseline info, about area and GW, and monitored as we go along. WQ – sedimentation, erosion, runoff – want assurances, methods of measuring and monitoring and sharing info. To whom do we report problems. Cliffs has a mixed record, don't always comply with own assurances. Cliffs declined to do golf course in environmentally friendly way.

Sandra Abramitis Here to read Swannanoa Pride statement: To the many community members of Swannanoa who live downstream of the proposed Cliffs development, this application raises several potential questions and concerns. The Cliffs claimed in an application as mitigation, the state-mandated 30-foot buffer from Trout streams. Compliance with the law is not mitigation and should not be counted as such. The USFWS has verified that these stream beds contain wild brook trout. The Cliffs permit proposes to construct culverts for both roads and golf courses, making the streams virtually uninhabitable for the trout that live there. Based on the input that we have received from residents, there is a significant public concern about chemical runoff from the golf course and its impact on water quality. Over 4,000 linear feet of stream channels as well as wetland and open waters are included in the proposed golf course. What type and volume of chemicals are the Cliffs proposing to use on the golf course. What kind of buffers other than grass will be used to keep chemicals including nitrogen out of the stream beds. As stated in the application, all stream channels on the site ultimately drain into the Swannanoa River or Cane Creek, both of which flow into the French Broad River. There are many traditional fishing holes along the Swannanoa

River where longtime residents gather at the river for recreation. What sort of impact will chemical runoff from the golf course have on the life of the river and the health of the Swannanoa Valley residents. In addition, Swannanoa residents who rely on well water are alarmed about this potential runoff. Finally, we are concerned about the offsite mitigation that will take place in Henderson County and not in Buncombe County.

Dennis Whitmire President of J.T. Whitmire Grading. Impact to local economy. We are hiring locally, so jobs are already being creating. Noted that existing development such as roads in the area also involved impacts to streams. Company associated with Cliffs for 22+ years, very environmentally conscious. Always require more than the minimum of their contractors for environmental regs. Never cut corners when it came to the environment.

Shane Laughter Owner of Fletcher Grading Contractors in Buncombe County. Native of western NC. In business 12 years, worked with Cliffs past 6 years. Grown to 50+ employees, usually 20/day for Cliffs. Main work with Cifffs is erosion control. Very important to company. Very nice when erosion control inspector comes onsite and uses your project as example of what to do, instead of what not to do. Enjoy working with Cliffs, Mr. Anthony works onsite often. Haven't met other developers onsite. Company is ½ mile from site, so businesses local have benefitted, like gas stations, restaurants.

Ryan Griffith On behalf Western NC Alliance, 26-year-old environmental advocacy group working throughout western NC and represents 800+ people in Buncombe County. Golf course does not have to be built, there are other amenities that could be considered. Mitigation proposed is inadequate because developers are improperly including the legal requirement of trout buffers as part of the mitigation plan. State may not legally issue a permit that destroys trout streams. In addition to legal reasons, we cite these others as reasons not to grant the permit as requested. 1) Impacts to area streams from runoff pollution, like nitrogen fertilizers and herbicides and pesticides from golf course maintenance. This is important to Fairview residents. 2) Sedimentation impacts to area streams, especially during construction and storm events. Sedimentation already happening from improperly installed BMP's. Big concern to Alpine Mountain residents. 3) Increased risk of flooding during storm events. Streams will be constricted where culverts are used due to reduced ability of streams to accept higher than normal flows due to the rain. Likely result is that streams will overflow banks with greater frequency, bypassing culverted sections. 4) Impacts from changes to GW hydrology. Will affect area wells and stream flows. Following saturated stream flows and extreme storm events there will be an increased risk of landslides in areas of unconsolidated soils and rock substrates. Loss of tree canopy from golf and subdivision development to date already impacted aquatic resources during precipitation and runoff. If permit is granted these impacts will be magnified for each of the above issues. We ask you to deny the permit as submitted.

Ed Stein 14-year resident of area. Urge people to talk about project, whether for or against. Recent news articles didn't mention this hearing. If Tiger Woods had a Nike hat on, he'd have a check in his pocket for doing it. Outgoing administration has gutted Clean Water Act. Sad history of ignoring cumulative impacts of developments on wq with chip mills in NC, one can't expect much in terms of enforcement. Mtn Air development with its frequent problems has become a local joke and yardstick of regulatory ineffectiveness. Here we are discussing another impact to our diminishing mountain ecosystems and high watersheds. Sacrament of profit motivates such projects and literally moves mountains (geological and regulatory mountains). Granting permit will ignore cumulative impacts to our hydrology and abandon the mission of a regulatory agency as was done at Puncheon Creek in Madison County. It would be nice to imagine the highest standards will be adhered to, noting of course who gets to define those standards, and that our concerns will be taken seriously and the 401 will be denied. I don't think Fairview will stop growing if the golf course is not built.

DJ Gerkin – SELC – also speaking on behalf of Western NC Alliance – 1) DENR cannot grant 401 if practical alt exists with lesser impacts to these trout streams. Cliffs says stream burial is necessary for design to accommodate lower skill golfers, for aethetics and walkability. These reasons don't demonstrate that there's no practical alt to burying streams. We ask that you send them back to drawing table and deny permit as submitted. 2) Mit plan is inadequate under state law preservation of streams is permitted, but only to the extent not already protected by regulatory schemes. Buncombe County stormwater requires 30-foot setback from streams for pervious surfaces already. These are trout waters protected by Sedimentation Act which require 25-foot vegetated buffer for any grading. Preservation is half of mitigation proposed and doesn't meet that hurdle because of existing protections. 3)

Length of culverts so impassable to trout in designated Trout Waters for natural propagation of trout species. By eliminating trout from use of these waters both above and below the culverts, because they'll be impassable, project will undermine downstream wq standards so application should be denied as submitted. We ask you to send them back to the drawing table for a substantial re-write.

Ed Ingle – DOT Roadside Environmental employee, but not speaking for DOT tonight. 36 years reviewing and doing erosion control, planting trees on thousands of acres. Try to make them as natural as possible. In private life, environmentalist and member of most organizations in western NC. Participated in many projects – killing, revising, negotiating. Live in Mills River, and opposed environmental groups that wanted to build a dam. Need to choose battles. Cliffs does a good job, have staff certified in erosion control. Trust and Verify. That's what DENR will do.

Bill Newman Resident of Candler and chairman of the Planning Board, served on board since 2002. Cliffs has brought several projects. Walnut Cove project was done very well from planning to erosion control. Neat to see the way Cliffs kept areas natural and allowed for beauty onsite. Cliffs will protect trout streams based on my experience. Large trout in streams observed at golf courses similar to the one Cliffs wants to build. Likes to golf and fish. Work from Cliffs always above board and excellent.

Louis Penland Native of western NC and Macon County, lifelong student of BMP's, made a career of application of what I've learned both as a real estate developer and volunteer/leader on non-profit boards. Offers endorsement and a suggestion. Family always worked with land. Last 25 years spent assisting in responsible developers create properties with worldclass golf courses. Much experience for setting positive example comes from working with Jim Anthony and Cliffs team in NC and SC. Personally endorse approach of the Cliffs. Jim Anthony among pioneers for environmentally responsible development on mountain slopes and complex watersheds. Have personally seen him insist on increasing his company's investment in engineering for road and homesite preparation with state of the art stormwater management systems, and golf courses in keeping with topography and soils of our region, all when the regs permitted cheaper alternatives. Anthony among first to recognize potential of environmental responsibility as a marketable amenity. Example has given me and other western NC professional developers the confidence to council local governments to resist temptation to lower every barrier to real estate development to where anybody with a rented bulldozer is free to rip apart mountain land. My experience has given me a voice on local boards of local land trusts. We can afford to work together towards healthy growth. We need growth and rules to guide it. Can't allow ourselves to backed into choice of two losing positions. No new development – or no conditions. Need to be able to trust each other to do the right thing. Focus on issue – mostly concerns about practices effects on streams and groundwater. The Cliffs have shown me they can be trusted.

Rick Frizsell Native of western NC, 40 year Fairview resident. Neighbor of Cliffs. 14 years in construction business. Never seen a company more focused on wq and erosion control. Placed many layers of silt fence and structures, where need as soon as possible, and inspect them on a regular basis. Work for the Cliffs and know they will do everything possible to protect wq.

Larissa Bowman Here on behalf of 26-month old son. Resident of Flat Top Mountain and witnessed much change. Cliffs will be largest development ever in Buncombe County. Will be intimate neighbor. Not in favor of permit being granted as written, but not a wholesale neighsayer. Want son to enjoy safe abundant water. Concerned about impacts on streams, flora, fauna. Oversimplified answers to not reassure folks. What will be golf course water consumption, and where will it come from. Tapping into aquifers from wells, or drawing from municipal supplies. Need confirmation. Conservation measures to keep the greens environmentally friendly. Pesticides – scientific names of compounds to be used and complete list. What amounts during each season? Can't dilute away pollution. During times of plenty rainfall, need assurance that buffer zones will be sufficient. Can green golf course methods be expected to work here? Or is Clemson golf center just to make us feel better?

Dee Dee Styles Live downhill on Swannanoa side from Cliffs. Existing buffers shouldn't be counted as mitigation. Bad message for other developers. Heritage dyer in Southern Highlands Craft Guild. Use traditional methods to color cloth. Concerned about wq impacts, esp silt and chemicals that might interfere with natural dyes. Alpine Mtn. development made stream and pond on homesite muddy all the time. Had to get water from other places that are downhill from Cliffs. Chemicals may be toxic and invisible. Believe Cliffs will follow rules, but are the rules

adequate to protect streams, especially from accidents. Who will monitor wq? Who will protect wildlife, families, wells?

Bonnie Vess Native of Fairview – Only learned of hearing from email on internet. Personal experience as child in Fairview. Swam in creek and didn't have to worry. Strawberry fields were safe. Don't know who pays you (Mr. Zimmerman), I have a feeling it's the people of NC and your job is to protect clean water. Appreciated Kirby Harrison speaking of how much money he makes working from the Cliffs. Sad to see what Cliffs has done on Swannanoa side. Mr. Bill Newman, planner – want to know why you permitted the Cliffs and then created zoning that nobody else could ever do. Nothing against the Cliffs but some of the dealings were sly and underhanded. Mr. Gordon promotes Cliffs and has money from them, and Mr. Nesbitt might have sold them property and gotten money. Animosity among all people on both sides and that breaks my heart too. Concerned about future of our beautiful place and Tiger Woods doesn't know what I'm talking about. If permit is granted, want a list of people I can sue when my creek is damaged with chemicals or whatever may come up from this Clean Water Act permit. Don't think grandchildren will be able to do what I did in creeks. Now I swim in swimming pools.

Stephen Schmeiser Pres of local chapter of NCWF, 10,000 members, donors, associates. Speakind for self: Resident downstream. Personal concerns but don't have enough info to form view. What I've learned about Cliffs speaks well from previous projects. Speaking for NCWF: Our constituency includes all NC wildlife in addition to members. Concerned that processes do not always consider wildlife water quality needs. Concerned about trout streams. Request is that info necessary to evaluate impact on trout and other wildlife. Want more info from Cliffs about golf course management. Enforce statutes. Concerned about buffers as mitigation. Mitigation should be close as possible, ideally on mountain. Will seek meeting with Cliffs mgmt to gain better understanding. Pointing to Tiger Woods quote in Cliffs brochure: "Experiencing nature, there is no better way to do this than on a golf course."

Cindy Hady – Fairview resident. Concerns about home wells and springs. Extreme drought. World community appeal. Golf course will require enormous water to sustain it. Neighbor lost spring as soon as Cliffs started excavating on his side of mountain. Contamination of wells from golf course is a concern. No guarantee that no chemicals will be used. Not to late to stop madness. World has enough golf courses and fewer nature preserves. Proposed Tiger Woods Nature Preserve.

William Jakobi Visiting region since 50's, resident since 80's. Will die here. Storm runoff laden with mud and silt. Plaudits are from people with economic ties to Cliffs. No comparison to other golf courses by Jim Anthony – this one on mountain. Gravity pulls water faster out of terrain, turf will dry, will need more water. Toxic pollutants – golf courses are the most toxic recreational use the land can be put to. Severe drought requires new thinking. Global warming is progressing. Glaciers are receding. 5X as much open water at north pole as 5 years ago. Animals moving south later. Ski resorts in Europe affected. Converting ski resorts to spas, which is what the Cliffs should do. Hiking, horses, should be 21st century business plan for the Cliffs.

Monroe Gilmour Black Mountain resident, Swannanoa Alliance for Beauty and Prosperity coordinator. Work on land use issues like billboards and clearcutting. Met with Mr. Anthony and his senior officers, toured Cliffs construction 3 times. Impressed with quality of dedication and determination. Anthony assured us that in 5 years, people near Cliffs would say they're good neighbors. Far more about quality than other developers who would be there. However, concerned with permit application. Appeal to think about what's been said about trust and going the extra mile. Permit will do damage to effort to persuade us they're a good neighbor. Request that they discuss project more with SELC and wildlife people. Challenge to division to be barrier to citizens and what happens there. Do sincere job, and keep law and best interest of NC in mind.

Palmyra Romeo On behalf of Riverlink non-profit in French Broad River watershed, dealing with wq issues. 18.5 miles of Swannanoa River are impaired, so further impacts affect that impaired status. Sediment and lack of BO integrity, poor BMAN integrity. Concerned about offsite mitigation in Henderson County not helping Swannanoa River. Thinks impacts could be minimized considering that it's a trout stream. Cliffs should continue to set good example on large scale.

Lynn Rapp – Fairview resident. I need water. I like water. Water is good. I want clean water. But that's not very articulate – so reconsidered speaking tonight. However, as someone who has struggled with well issues for 3 years

in drought, words are pertinent. Neighbors did construction and blasting, so I had to shower at Y, go to Laundromat, and this past year has finally improved so I can shower at home. Well adjusted to improve water pressure, but septic tank backed up. Water quality and quantity are important. Have master's degree but don't' understand all technical issues with project. Common sense says that applying a lot of chemicals on the mountain is not a good thing.

Richard Bartlett Buncombe County resident. Carolina Ready Mix in Swannanoa. Employ 17 staff and 75 people including families. 17,000 tons recycled product sold to Cliffs. Job site concrete trucks have to cleaned in specific area with not threat to environment. Have to keep dust down. Income cares for wife and 6 kids. Cliffs to my knowledge recycles golf water. People downstream of Alpine Mountain were affected when that was built, but that worked out. The Lord will bless us with water, it's as simple as that. We're in a drought, the water will come back.

Robert Gale As a professional ecologist whose work deals with forest health and restoration, in NC mountains, concerned about stream burial for development amenity. Ecological functions will be degraded downstream. DWQ should not consider allowing degrading of trout streams at this site. State encourages and funds stream restoration efforts, and upgrading streams, so it would be inconsistent to allow the opposite here by issuing permit. Buffer preservation should not count as mitigation. Henderson County shouldn't be where the mitigation occurs, but rather in vicinity of impacted watershed. Swannonoa River has huge wq problems, so restoration should be there first. Various forms of pollution during construction and beyond – sediment despite BMP's will occur in mountain topography during storm events. Measures will fail. Pollution from fertilizers, pesticides, herbicides, fungicides used on golf course may be amplified if permit is issued. Permit will increase risk of flooding due to lost capacity of buried streams to carry water inputs. Increased likelihood of gw hydrology changes. Cumulative impacts from loss of tree cover. 15 years experience supervising site work, plus 5 years experience supervising golf course work in Hilton Head. This golf course is different due to mountain setting. Very little follow-up enforcement seen in personal experience. Urged denial of permit in current form.

Stephen Parrish Builder, live by the Cliffs. Look at long-term impact to the community. Conflict of interest in approving development. Water sources to be used would not be monitored in future. Want assurances that water sources will be guaranteed, and that long-term commitment to quality is maintained. Deny if so caused.

Steve Norris Fairview resident. Concerned about ability of regulators to oversee projects such as this. Erosion problems from another development affected stream quality on my property, and DWQ determined the stream was dead and threatened the developer with fines. But then DWQ went away and nothing was done to correct the problem. We put pressure on erosion control people in Buncombe County but they did nothing. Erosion hasn't been a problem during drought, but rain will return. Need better public supervision of problems like this because the chance of problems are significant, inevitable. Until agencies have resources and will, sig impacts on public will result.

Carol Morrow Our house borders Cliffs on two sides. Loss of habitat, tremendous amount of water used on golf course. Australia's been in drought for 12 years, so who knows how long ours will last. I live at 4,000 feet and don't know when my well will go. Don't want to have to pay for city water to come up there. Really worried I wont' have water.

Bartley Stickle Alpine Mtn. resident. 900 foot well dried up this year after blasting began at Cliffs. Collect roof water and purify it. Well systems have to be protected.

Richard Crutchfield Professional Water Douser (Water Witch). 20 years experience, concerns about wells serious. Have known many wells to go dry. Have seen many people buy property before having assurance that water was present. People up the mountain have to struggle to get water. Only so many water veins in Cliffs area. How many veins are circulating, how many aquifers in bedrock. How many people down mountain depend on wells? How many people would be affected? Need to get a general picture of needs down mountain and on development. Golf course requires 50 gal/min to water greens. Cutting trees somehow compromises circulation of water underground.

Troy Amastar Mountain Voices Alliance non-profit in contact with people affected by many developments in recent years. Hundreds of huge houses will impact area. No way to put in development, golf course, air strip. More runoff, fewer trees, affect rainfall, water tables. Cousin on back of mountain says many more sightings of bears.

Bears affect houses, pounding on glass doors, going into trash. Forever changed, will never be back the way it was. Quality of left, water to drink, air to breath will be lost if it doesn't stop.

George Loughcrist Not affected by water aspects brought up. Sure that Cliffs is a quality development that will contribute to the community, although I haven't been in the gates. Burying 8/10 mile of trout stream is unconscionable.

Shane Laughter (again) – Fletcher Grading – How many people from Alpine Mountain showed the same concern for people downstream when you build your houses. Cliffs at Glassy is a golf course on a mountain, go check it out if you have the opportunity.

APPENDIX C

Written Comments
The Cliffs at High Carolina

From:

clayton moore [claytonmoore2006@yahoo.com]

Sent:

Friday, November 21, 2008 3:55 PM

To:

jay.zimmerman; Cyndi.Karoly; Roy.Davis; Janet.Boyer; Hartwell Carson

Cc:

larry_ausley; MBarrett

Subject:

Public Comment on The Cliffs at High Carolina stream burial permit

TO: Cyndi Karoly, et.al.

N.C. Department of Environment and Natural Resources

Raleigh, N.C.

Thank you for opportunity to comment on this major 3000 acre subdivision and golf course project in southern Buncombe County, N.C.

Regardless of the status of Jim Anthony's requested permit to bury 6000 feet of mountain trout steams, The Cliffs at High Carolina golf course's plan for spray irrigation of domestic sewage project presents a unique opportunity for NCDENR Technical Services to conduct studies of the probable aquatic impacts from a project of this size and nature.

Larry Ausley and crew could consider collecting "BEFORE" and "AFTER" water, sediment, and fish samples while performing benthic surveys.

A BEFORE study of this scope will determine the existing levels of nutrients, and organic compounds (herbicides and pesticides and fuels), as well as how the bug population is affected by the major land use change anticipated here.

The AFTER study will show any post-construction effects/changes in water column.

Sediment samples should also be collected from the golf course areas to determine the levels of fecal bacteria, nutrients and metals in the grasses of the recreation areas traversed by golfers and residents of all ages.

This data collection plan should include installation of shallow monitoring wells to determine groundwater quality impacts from this spray irrigation of domestic sewage.

Will this subdivision include a restaurant facility? The sewage from this type of building will include grease, oils, and chemical cleaning compounds which can clog spray irrigation nozzles.

Will this project include a swimming pool which will be discharging pool water disinfectant and other concentrated cleaning compounds? If so, what do the plans show for treatment and disposal of this sewage water from back-washed filters?

Straight-piping this sewage to a creek is not a good option for the water quality.

This "BEFORE" and "AFTER" data will be invaluable in future planning and modeling methods by the Archdale Building engineers when future projects like

The Cliffs at High Carolina are presented for review.

The biggest water pollution problem in any land disturbing activity now is from sediment. Regulations allow developers a time period to install best management practices after grading has been completed.

How can inspectors decide when this grading period ends? Given the ongoing nature of this massive project and the perpetual presence of grading machinery on site, how will inspectors determine grading has ended?

Thank you for your careful consideration of these and any other public comments.

From:

John.Hennessy@ncmail.net

Sent:

Monday, November 24, 2008 8:47 AM

To:

cyndi.karoly; jay.zimmerman

Subject:

Fw: Fwd: CLIFFS /Opinion editorial in C-T

Attachments:

icon_whatsthis.gif

FYI.

----Original Message----

From: francois@redherringpuppets.com

Date: Nov 23, 2008 14:50

To: <john.hennessy@ncmail.net>, <cyndi.karoly@ncmail.net>

Subj: Fwd: CLIFFS /Opinion editorial in C-T

Hello

Thanks again for doing a great job serving the people in North Carolina by coming to Asheville . We are proud of your agency . Here is below the editorial of the Citizen- Time giving a larger echo to our concerns .

Sincerely Francois MANAVIT

Begin forwarded message:

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> From: francois manavit <francois@redherringpuppets.com>
> Date: November 23, 2008 2:19:08 PM EST
> To: anne sourdril <sourdril@uga.edu>, Rebecca Williams
<serpentchild@earthlink.net</pre>
> >, shari robins <sharirobins@earthlink.net>, nhnpaws@yahoo.com,
bob
> cozart <bobcozart@hotmail.com>, rkclimber4jesus@bellsouth.net,
terrelljones3@yahoo.com
> , lkbt94@aol.com, cactus & brooke <undergroundplayground@gmail.
> Will Weatherford <fiveweatherfords@gmail.com>, jeannebernie@att.net,
robertdcozart@hotmail.com
> , maryannauer@bellsouth.net, B Stewart <bstewartmd@gmail.com>,
Rick
> Nelson <rln123@bellsouth.net>, hamer <hamer220@bellsouth.net>, denice
> transue <deniceashv@aol.com>, scribenc@biz-comm.com, joseph mc Keon
> <nmckeon@msn.com>, allan zullo <allanzullo@bellsouth.net>,
b
> steward <bstewartmd@gmail.com>, Barbara Swart
<mtndulcimerbas@bellsouth.net</pre>
> >, vickiehking@gmail.com, caroline kennedy <ckennedy@unca.edu>,
Kim
> Christman <kimchristman1@netzero.net>, jacques Lewin
<lewinjacques@bellsouth.net</pre>
> >, effort.tv@earthlink.net, Patrice Olivier-Wilson <biz@biz-</p>
> comm.com>, margaret Mathews <margaretmathews@bellsouth.net>,
jeannebernie@charter.net
```

> >, rj dull <rjdull@hotmail.com>, political@sierraclub-nc.org, Tim
> Ormond <tim_ormond@hotmail.com>, Pisgah.group.nc@sierraclub.org,
djgerken@selcnc.org

> , lisa.cox@sierraclub.org, buzz.bryson@pgnmail.com, James.
Berrier@ssa.gov

- > , troutfish@bellsouth.net, Diane Morgan <dmorgan@unca.edu>, Gracia
- > O'Neill <gracia@cwfnc.org>, dave.maeda@gmail.com, patch@unca.edu,
- > Samuel Edward Evans <sevans18@utk.edu>, Julie Mayfield
- > <julie@wnca.org>, allenhope@bellsouth.net, Monroe Gilmour
 <mgilmour@main.nc.us</pre>
- > >, Carol Groben <treehouse68@charter.net>, Hartwell Carson
 <riverkeeper@riverlink.org</pre>
- > >, Dede Styles <dede@skyrunner.net>, Jennifer Robertson <jennifer.robertson@wetland-consultants.com
- > >, Don Nickell <dnickell@cliffscommunities.com>, lhobbs@CMRplanning.com
- > , lindag@landofsky.org, christa.wagner@sierraclub.org, gevaugha@duke-energy.com
- > , hartwell carson <riverkeeper@riverlink.org>
- > Cc: shannonearl@yahoo.com, tresqueens@charter.net, paul choi
 <paulpchoi@gmail.com</pre>
- > >, mjsummit@hotmail.com, karen jaffe <kjsummit@hotmail.com>, Lina
- > Evans <linalee113@yahoo.com>, jager@ioa.com, Rebecca McNair <rebecca.
 mcnair@gmail.com</pre>
- > >, Susan Sides <susides@gmail.com>, bobmcdonld@worldnet.att.net,
- > Richard Mike & Marilyn <wmrichard@bellsouth.net>, Tip Kilby <tip.
 kilby@ashevillefinancial.com</pre>
- >>, anne sourdril <sourdril@uga.edu>, Rebecca Williams
 <serpentchild@earthlink.net</pre>
- >>, shari robins <sharirobins@earthlink.net>, nhnpaws@yahoo.com, hob
- > cozart <bobcozart@hotmail.com>, rkclimber4jesus@bellsouth.net, terrelljones3@yahoo.com
- > , lkbt94@aol.com, cactus & brooke <undergroundplayground@gmail.
 com>,
- > Will Weatherford <fiveweatherfords@gmail.com>, jeannebernie@att.net, robertdcozart@hotmail.com
- > , maryannauer@bellsouth.net, B Stewart <bstewartmd@gmail.com>,
 Rick
- > Nelson <rln123@bellsouth.net>, hamer <hamer220@bellsouth.net>, denice
- > transue <deniceashv@aol.com>, scribenc@biz-comm.com, joseph mc Keon
- > <nmckeon@msn.com>, allan zullo <allanzullo@bellsouth.net>,
- > steward <bstewartmd@gmail.com>, Barbara Swart
 <mtndulcimerbas@bellsouth.net</pre>
- > >, vickiehking@gmail.com, caroline kennedy <ckennedy@unca.edu>,
 Kim
- > Christman <kimchristman1@netzero.net>, jacques Lewin
 <lewinjacques@bellsouth.net</pre>
- >>, effort.tv@earthlink.net, Patrice Olivier-Wilson <biz@biz-
- > comm.com>, margaret Mathews <margaretmathews@bellsouth.net>,
 jeannebernie@charter.net
- > , diana cota <dianacota@bellsouth.net>, Susan Weatherford
 <sweather@unca.edu</pre>
- >>, rj dull <rjdull@hotmail.com>, allenhope@bellsouth.net,

```
boydmiller@bellsouth.net
 > , digitldave@earthlink.net, cpwagner@bellsouth.net, jim.susan.
 wade@verizon.net
 > , barryweinhold@gmail.com, Jennifer Taylor <deely@bellsouth.net>,
 kernersvillekath@aol.com
 > Subject: CLIFFS /Opinion editorial in C-T
> The Cliffs should change plans to protect streams, wetlands f_{-}
> PUBLISHED NOVEMBER 23, 2008 12:15 AM Post a CommentRecommendPrint this
> pageE-mail this articleShare
> Comments on Topix forums (click to comment):
> The Cliffs developer Jim Anthony earns high marks for careful
> development that honors the environment.
> But he and Tiger Woods, designer of the golf course at The Cliffs
at
> High Carolina, should rethink their proposal to place 6,149 feet
of
> trout streams under culverts and disturb about a fifth of an acre
of
> wetlands as part of the development of the 3,000-acre site. About
> 4,000 feet of the stream culverts would apparently be used to bury
> streams underneath the golf course.
> Itf\_\mathsf{Ts} hard to conceive that the course and homes could not be
> designed in such a way as to leave these high-quality trout
streams
> and small area of wetlands undisturbed.
> And, even in an economic downturn, theref_Ts no reason to believe
> developer canf_Tt afford to protect these critical areas. Anthony
said
> after an event on the site with Woods Nov. 8 that 50 lots have
> sold for more than $40 million.
> Western North Carolina, which once had about 5,000 acres of
mountain
> bogs, now has 500 or less. A mountain bog is one of several kinds
> wetlands. Swamps, coastal marshes and tundra are other examples.
> Wetland is a term for all the different kinds of habitats where
the
> land is wet for some period of time each year, but not necessarily
> permanently wet.
> Vanishing habitat
> Between the mid-1950s and the mid-1970s, untold acres of wetlands were
> lost, drained for agricultural purposes, for industrial
> for highway construction, and for residential and commercial
> development, among other things.
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> According to the National Audubon Society, up to one-half of North
> American bird species nest, feed or rest in wetlands. Bird species
> have declined as wetlands have been destroyed. The bog turtle, the
> federally endangered bunched arrowhead and the mountain sweet pitcher
> plant are among the species that rely on mountain bogs.
> Wetlands also serve two other major functions. They are vital to
> cleansing water, trapping sediment and capturing nutrients. And
> help prevent flooding by soaking up and storing storm water. The loss
> of wetlands undoubtedly contributes to severe flooding in
storm
> events like Ivan and Frances in the fall of 2004.
> Ecosystem impact
> Burying more than 6,000 feet of trout stream will not only have an
> impact on the fish, but on a number of other plants and animals
> depend on the ecosystems created by the stream. Theref_Ts no excuse
> do that when the designer and developer should be able to easily
> design the course around the present configuration of the land.
> Some speakers at a hearing held by the N.C. Division of Water Quality
> on the developerf_Ts request for a permit to disturb the streams and
> wetlands raised concerns about chemicals that will be used on the
> course.
> Thatf_Ts a critically important concern where streams and wetlands
> concerned. Amphibians, which are in alarming decline worldwide,
are
> especially vulnerable to chemicals.
> We urge Anthony and Woods to seek a design that preserves the precious
> streams and wetlands on the property and to choose the chemicals they
> use to manage their course with great care.
>
> PUBLIC COMMENT
> Public comment on the permit will be accepted by the Division of
> Water Quality through Dec. 18. Comments can be directed to: cyndi.
karoli@ncmail.net
>
>
>
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From:

John.Hennessy@ncmail.net

Sent:

Saturday, November 29, 2008 8:42 AM

To:

jay.zimmerman; cyndi.karoly

Subject:

Fw: The Cliffs at High Carolina, Tiger Woods golf course

FYI.

----Original Message----From: nhnpaws@yahoo.com Date: Nov 28, 2008 9:15

To: <john.hennessy@ncmail.net>

Subj: The Cliffs at High Carolina, Tiger Woods golf course

As a Fairview resident living approximately 1/2 mile from the Cliffs at High Carolina and the Tiger Woods golf course, now under construction, please hear our cries!

We, along with all residents of the Spring Mountain community rely totally on wells and springs for our homes. Western North Carolina is in an extreme drought (see: www.ncdrought.org). We appeal to your sense of world community and respect for the seriousness of this situation. The duration of this drought is very concerning to allof us in Buncombe County. Now the planned Tiger Woods golf course will require enormous volumes of water every day to construct it and sustain it, as well as the large estates to be built on this 3,000 acre development site.. Our neighborhood is already being impacted. Just three weeks after the Cliffs began excavating on our side of the mountain, a neighbor at the top of the ridge lost his spring. This same neighbor now has to haul his water up the mountain to his home. Who is next?

We are scared, not only for the loss of our well water, but also for the contamination of our wells from the chemicals that may be used on this golf course and development. We have been given no guarantee from the developer, Jim Anthony, that none will be used. We are all downhill from The Cliffs.

Additionally, we now have bear sightings on a regular basis as they continue to lose their habitat. How will the Cliffs at High Carolina remedy their situation?

In the spirit of conservation and reasoning we plead to you to let common sense prevail. It's not too late to stop this madness. We are afterall, stewards of the Earth. Let's act like it.

The world has enough golf courses, and fewer and fewer nature preserves. I propose The Tiger Woods Nature Preserve. Now that's a proud legacy we can all live with.

Respectfully,

Cindy Hady

204 Bear Court, Fairview, NC 28730-7634 828-628-3313

Αÿ

Αÿ

Αÿ

From:

Donald De Bona [donalddebona@bellsouth.net]

Sent:

Tuesday, December 16, 2008 3:20 PM

To: Cc: cyndi.karoly jay.zimmerman

Subject:

comments on the Cliffs application to the NC DWQ

Pretty simple here guys.... the Cliffs project needs to more closely examined before any permits are issued for ALL OF THE FOLLOWING REASONS. Get to work.... please. thanks, Don DeBona Asheville NC

In order to receive these permits, The Cliffs must mitigate the stream and wetland impacts. They are proposing to enhance or restore 6,251 linear feet of impaired brook trout streams in Henderson County; to "avoid" (not "impact") nearly 18 miles (93,972 linear feet) of on-site streams; and to restore/preserve a tiny amount of wetlands, both on and off-site.

The primary concern here is that The Cliffs is counting as mitigation the 30 foot stream buffer, which they are required by various local and state laws to protect. Mitigation, however, is intended to protect or preserve areas not already protected, so counting this already protected area as mitigation should not be allowed. DWQ needs to hear this message loud and clear.

Furthermore, any restoration work done as part of the mitigation plan should, at the very least, be done in an area within the same county as the disturbance. Restoration of the Shoals Falls Farm Site in Henderson County does little for the people of Swannanoa and Fairview who will be most affected by this development.

three points that pertain directly to the permit:

- 1) The **amenity** of the golf course itself is not necessary. The Cliffs do not have to build the golf course. There are other amenities they can provide their residents that do not impact trout streams;
- 2) The **mitigation** in the permit is inadequate The Cliffs cannot use a legal requirement (the 30 foot trout stream buffer) as part of the mitigation plan (i.e. they are already *required* to do that, it should not count as part of what they are doing to "make up" for the damage they are doing);
- 3) The **destruction** of trout streams DWQ cannot legally give them a permit to destroy trout streams. They are supposed to be protecting water quality, not approving it's degradation.

The permit specifically deals with The Cliffs' request to pipe and bury the trout streams, but all of the points below are generally within the scope of the permit. To ensure that these comments are included on the record, you should use the opening phrase "If you grant this permit..." So here are some points for your letter:

Chemical Pollution - If you grant this permit, there will be impacts to area streams from runoff pollution, such as nitrogen from fertilizers, and herbicides and pesticides from golf course maintenance.

Sediment Pollution - If you grant this permit, there will be sedimentation impacts to area streams, especially during construction and storm events. Wild rainbow trout occur in Cane Creek and were recently found in Rocky Fork Creek Trout possibly brook were observed in an unnamed tributary to the lake as well. The potential for downstream sedimentation from the impact sites is considerable because of steep topography and the extensive earth moving that will be necessary Sedimentation in Rocky Fork Creek could harm trout.

Flooding - If you grant this permit there will be increased risk of flooding during storm events. The stream will be constricted where culverts are used, because of the reduced ability of stream channels to accept higher than normal flows due to rain. The likely result will be that the stream will overflow the banks with greater frequency, bypassing the culverted sections.

Landslides - If this permit is granted, there will be an increased likelihood of impacts from changes to the groundwater hydrology. This could affect area wells and stream flows. Following saturated soil conditions and extreme storm events, there would be an increased risk of landslides in areas of unconsolidated soils and rock substrates.

Loss of Tree Cover - The loss of tree canopy as a result of the development and golf course activities conducted to date at The Cliffs has already impacted aquatic resources with respect to precipitation and runoff. If this permit is granted, these impacts will be magnified for each of the above issues.

Other questions to ask (or phrase as actions that you expect from The Cliffs):

Why aren't bridges being designed in lieu of culverts, thereby avoiding stream impacts?

What storm events is the project being designed for? 25 year? 50 year? 100 year? In just the last few years we have had several 100-year events, so designing culverts, etc. for anything less is unacceptable.

Who will monitor water quality in the area if this permit is granted? The Cliffs? DWQ? When? -- Before, during and after construction? And for how long into the future?

How will DWQ ensure that water quality requirements are maintained by The Cliffs? Who is responsible for reporting any pollution events to the state? Will the golf course be closed while corrections are made if water quality is impaired?

How will The Cliffs ensure that no sedimentation occurs as a result of activities arising from the granting of this permit? Best Management Practices (silt fences, hay bales, ditches and impoundments) that are effective in the piedmont and coastal plain provinces regularly fail under the conditions that exist in mountain topography. What other measures will be taken by The Cliffs?

From: Sent: Tom Pugliano [TomP@tasconline.com] Tuesday, December 16, 2008 5:32 PM

To:

<cyndi.karoly@ncmail.net>; <jay.zimmerman@ncmail.net>

Subject:

Commentary on the Cliffs

Categories:

Red Category

To Whom It May Concern,

RE: The Cliffs

I'll make this brief. I moved here because of the quality of the trout streams and the local consciousness toward them. If you start a policy of destroying them, you've just become any other suburb. I was raised in Montana where mountains, clear water, and trout are cherished. In relocating from Brooklyn, NY, I had to pick anywhere on the east coast to live, and chose Asheville.

I enjoy a mid six-figure income, have a nice home here on 3 acres, am 59 years old and in charge of the east coast for a national company. I only say that for credibility's sake.

I hope you do not go down a path of compromising any local habitat for the sake of a development. They are capable of building without ruining anything. Instead, require them to consult and then preserve what's there. There are countless first class golf courses from Whistler, BC all the way across America proving you can build a golf course without destroying any habitat. All courses have water hazards. It can be done. To often, developers charge into something and then claim they need this and that to finish the project and try to put it on the backs of the citizens instead of themselves. I've seen this tactic my whole life.

Developers don't deserve special treatment. I have to pass a perk test and I must be careful not to mess with my neighbors rights to the quiet enjoyment (basic real estate law) of their property. This developer doesn't have any rights what-so-ever to cause inappropriate sediment to any stream any more than I do. They are not special. They have the ability to play by all the rules. The responsible thing to do – what you are entrusted to do – is to make them do that.

Tom Pugliano

Thomas Pugliano
Sales Director East Coast
Total Administrative Services Corporation

Phone: 800-422-4661, ext 4354

Cell: 828-545-1619 Fax: 608-663-5969

Email: tomp@tasconline.com

Check out the link below to learn more about tax savings for micro business and how they can save money on 2007 taxes!

https://www.tasconline.com/clients/clientondemand/

Check out our web site at http://www.tasconline.com

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From: Sent: Dennis Clarke [dec0000@embarqmail.com] Tuesday, December 16, 2008 7:15 PM

To:

cyndi.karoly; jay.zimmerman

Subject:

Cliff's

To: Jay Zimmerman

c/o Cyndi Karoly

NC Division of Water Quality 2321 Crabtree Blvd. Suite 250

Raleigh, N.C. 27604

From: Dennis Clarke 468 Coffee Ridge Rd Erwin, TN 37650

Re: The Cliffs

Date: December 16, 2008

As a person who had hoped to retire in Western North Carolina, I am writing to protest the ${\sf Clifff_Ts}$ proposed alteration of the stream on the property in order to build a golf course. The fact that WNC has preserved the forests and the wilderness is an attractive drawing point for the area. Development is inevitable but it can be done in a way that is kinder to the environment. The streams are what many people come to the area to enjoy and to risk polluting them for development is selfish. If a golf course must be built certainly it can be done so in a more environmentally friendly manor . Development run wild is an ugly thing to see. Go to Orlando, FL area and see what has happened to a once beautiful area.

Thank you.

From: Sent: dianacota [dianacota@bellsouth.net]
Wednesday, December 17, 2008 5:54 AM

To:

cyndi.karoly; jay.zimmerman

Dear Cyndi, Jay,

I am writing you concerning the proposed golf course at the Cliffs of High Carolina. Living downstream, I am seriously concerned about the affects this whole development will have on the area; specifically the streams, and the life they support. I can see no reason for burying any amount of these already protected trout streams, or including areas already protected in their mitigation process. We, in the area deserve, at the very least, more inhancement in our county than what is currently being planned (or proposed) in Henderson County.. I understand that the Cliffs is including in its' mitigation, the already legal requirement of a 30 ft. buffer along these protected trout streams. This must be illegal (?)

I am also very concerned about the results of runoff from the entire development. I see day after day, huge trucks carrying away trees from the mountains being affected by the building of this humongous endeavor. Not only am I saddened, but also seriously worried as I, and quite a few of my neighbors live very close to what is now the 500 year flood plain. With all this natural flood control, i.e. natural vegetation, being replaced by asphalt, culverts, etc., our flood plain could change drastically. Please consider this when making your decision about this permit.

The other huge concern for the area is our water quality. As of now, The Cliffs has refused to say what kind of pesticides or fertilizers it plans to use on the golf course. Many people in the area depend on springs for their water. This is a very fragile system we have.

If you grant this permit, I'm sure we will see an increase in sediment runoff in our pristine Cane Creek-- there will be places where it will build up and settle, and places that will rush faster and wash out what has been there for generations.

I also want to know who will monitor the water quality in the area if this permit is granted. Who will be responsible if wells are contaminated? How will The Cliffs ensure that no sedimentation occurs as a result of activities that are occuring as we speak, not to mention when the golf course construction gets under way? Silt fences, hay bales, ditches, and impoundments defray but do not solve the problem of runoff on a mountainside.

I hope you will take serious consideration of this huge undertaking and the affect is, and will have, on our small community.

Sincerely,
Diana Cota

From:

Barbara Swart [mtndulcimerbas@bellsouth.net]

Sent:

Wednesday, December 17, 2008 12:05 PM

To:

<jay.zimmerman@ncmail.net>

Subject:

The Cliff at High Carolina's application for permit

Jay, I failed to send you a copy when I emailed this to Carol. FYI. Thx.

Dear Carol,

My original letter should be in your file but I want to again ask your agency to reject The Cliffs at High Carolina's application for a permit to pipe and bury trout streams as part of their golf course development.

One of my concerns is that The Cliffs is counting as mitigation the 30 foot stream buffer, which you are required by various local and state laws to protect. Since the mitigation is intended to protect or preserve areas not already protected, counting this already protected area as mitigation should not be allowed. It is my understanding that it is part of your agency's responsibility to protect our trout streams and I am asking you to consider rejecting this permit that would adversely affect these streams. This golf course is not a necessity and its construction and design can surely be altered rather than the streams that have been here for eons.

Also, any restoration work done as part of the mitigation plan should, at the very least, be done in an area within the same county as the disturbance. Restoration of the Shoals Falls Farm Site in Henderson County does little for Fairview and we are potentially the ones most affected by this development.

If this permit is granted, there are other issues such as sediment and chemical pollution, increased risk of flooding and landslides – not to mention loss of tree cover – that arise. Please look at this with the most critical of eyes.

Have The Cliffs and your agency considered bridge construction versus culverts? Have the criterion for the piedmont and other areas re: best management practices been altered for effectiveness for the unique WNC topography and weather conditions? What works there probably won't always work here.

Will DWQ ensure that water quality requirements be maintained by The Cliffs? Who will report infractions to the state? Have The Cliffs addressed sedimentation issues that may arise from activities resulting from this permit being granted and will you ask for some insurance re: this from them?

Please, decline this application and ask The Cliffs for more accountability and disclosure.

Thank you for your careful consideration of this permit and its residual effects, if granted. Also, thank you and DWQ for the hearing last month.

Sincerely, Barbara Swart 1418 Old Fort Road Fairview, NC 28730 828-628-1710

From:

Cindy & Ted [nhnpaws@yahoo.com]

Sent:

Wednesday, December 17, 2008 3:56 PM

To:

jay.zimmerman; cyndi.karoly

Subject:

Regarding: The Cliff's at High Carolina application for a 401 Water Quality Certification

December 17,2008

Dear Mr Zimmerman,

By now we have all heard about the ecological or carbon footprint; "By calculating the sustainable share of the world¢s resources can be shown." ¡environmental footprint¢, the extent to which a person is utilizing more or less than their fair

The Cliff¢s at High Carolina's proposed ecological footprint is likened to that of Gulliver¢s Travels in its scope and impact on our community. Devastation.

As a Fairview resident living approximately 1/2 mile from the Cliffs at High Carolina and the Tiger Woods golf course, (now under construction). NC Division of Water Quality,

Please hear our cries!

We, along with all residents of the Spring Mountain community rely totally on wells and springs for our homes. Western North Carolina is in an extreme drought (see: www.ncdrought.org). We appeal to your sense of world community and respect for the seriousness of this situation. The duration of this drought is very concerning to all of us in Buncombe County. The planned Cliff¢s at High Carolina and the proposed Tiger Woods golf course will require enormous volumes of water every day to construct it and sustain it

Our neighborhood may already being impacted. Just weeks after the Cliffs began excavating on our side of the mountain, a neighbor at the top of the ridge lost his spring. This same neighbor now has to haul his water up the mountain to his home. Who is next?

We are scared, not only for the loss of our well water, but also for the contamination of our wells from the chemicals that will be used on this golf course and development. We have been given no guarantee from the developer, Jim Anthony, that none will be used. We are all downhill from The Cliffs.

Additionally, we now have bear sightings on a regular basis as they continue to lose their habitat. How will the Cliffs at High Carolina remedy their situation?

The issue: Whether to allow The Cliffs to obtain a 401 Water Quality Certification from DWQ.

With this decision you choose an inanimate object in the form of a golf ball and a gated community for a few, requiring the destruction of forests, thereby adding to the exceptional drought conditions. The planting of grass needing mowing; thereby adding to Co2 emissions and depletion of our ozone layer.

With this decision you choose destruction of wildlife habitat; thereby forcing them to once again relocate to make way for humankind, who has forgotten how to coexist with nature and respect their right to live and thrive.

With this decision you choose erosion, landslides, silt and changes to the groundwater hydrology, thereby resulting in the contamination and loss of streams and wells.

Or;

In the spirit of conservation and reasoning we plead to you to let common sense prevail. It's not too late to stop this

madness. We are afterall, stewards of the Earth. Let's act like it.

Is this really such a difficult decision? You already have the facts in front of you.

Your decision is either for an inanimate object in the form of a golf ball or it is for our natural resources and planet Earth

The world has enough golf courses and fewer and fewer nature preserves. I propose The Tiger Woods Nature Preserve. Now that's a proud legacy we can all live with.

Additionally;

I received this short 2-minute film and couldn't help but think of the Cliffs development and the critical decision before you. I ask that you view it with our mountains and natural resources in mind, and pray that your wisdom will be brought to bear.

Please see: http://www.wisdombook.org/

As a planet we are on a precipice. We already know that the destruction of our natural resources is the destruction of ourselves. Will you stop the madness or hasten its demise? It's up to you.

Vote NO to deny The Cliffs at High Carolina's application for a 401 Water Quality Certification.

Respectfully,

Cindy Hady, 204 Bear Court Fairview, NC 28730 828-628-3313

From:

Mike Walker [walkmex@yahoo.com]

Sent: To:

Thursday, December 18, 2008 10:07 AM

jay.zimmerman; cyndi.karoly

Cc: Subject: Ted Hady Cliff's Development

Dear Sir,

As a long time visitor & current resident of Asheville, I am very concerned about the manner in which development has been allowed to occur without adequate provision being made to protect the environment and wildlife of western North Carolina.

I urge you to not allow wealth & greed to spoil forever one of the most beautiful locations in our country. Please ensure developers are required to do whatever is necessary to protect our environment & wildlife habitats.

Michael J Walker 21 Battery Park Ave Suite 404 Asheville, NC 28801

From: Sent: Karen Snow [snowcase@msn.com] Thursday, December 18, 2008 11:38 AM

To:

<cyndi.karoly@ncmail.net>; <jay.zimmerman@ncmail.net>

Subject:

Comment and request on Cliffs development permit

December 18, 2008

Jay Zimmerman

c/o Cindi Karoly

NC Division of Water Quality

2321 Crabtree Blvd. Suite 250

Raleigh, NC 27604

SUBJECT: Protection of streams, wetlands, and surrounding lands - Cliffs impact to water quantity and quailty, and to life – both human, domestic animal, and wild – that depend on the headwaters of streams that originate on Cliffs property

Your protection of our homesites and the natural habitats surrounding us is critial. You have the power to protect the quality of and the future of our lives. **Please, PLEASE** ensure that our streams, springs, and wells – our lives as well as the wildlife around us - are protected.

First, I want to state that I do not have any problem with responsible development that does not negatively impact or destroy existing wildlife and/or human habitats. My family owns/lives in a home on Rocky Fork Road, below the Cliffs development in Fariview/Swannanoa. We have owned this property for over thirty years and treasure our land as well as Rocky Fork Creek which runs in front of our property. The proposed development of Cliffs property, specifically the COVERING OR BURYING OF TROUT STREAMS AND WETLANDS IS UNTHINKABLE! THERE IS SO MUCH WILDLIFE LIVING BOTH IN THE STREAMS AND AROUND THE STREAMS DEPENDING ON THEM TO SUSTAIN LIFE. OUR HUMAN LIFE ALSO DEPENDS ON PROTECTION OF THE QUALITY AND QUANTITY OF WATER THAT WE RECEIVE FROM OUR SPRINGS AND WELLS. THE QUALITY OF SOIL ABOVE THE WATER TABLE AND THE WATER POTENTIALLY SEEPING INTO THE WATER TABLE IN OUR AREA IS CRITICAL. There already appears to be evidence of the blasting on the Cliffs property affecting the QUALITY AND QUANTITY of springs and streams on land downstream of the development. Along with the potential irreversible damage to or destruction of the Rocky Fork Creek by activities on Cliffs property INCLUDING RUNOFF FROM THE PROPOSED GOLF COURSE, I personally have a great concern over the potential impact to our spring which has fed this homesite for more than 60 years, possibly much longer. In the past years of drought, we have not experienced any decline in the output of our spring. Every distrubance of the bedrock and the massive grading of soil around the top and sides

of the cove in which we live could damage or destroy the UNPOLLUTED water source on which our family depends.

IF YOU GRANT THIS PERMIT the quality of water and the amount of the flow of streams (including at least two trout streams) sustaining human life, domestic animal life, and wild life in our area will be severly impacted by if not destroyed by:

- pollution runoff specifically from the golf course and the associated paths/roads
- downstream sedimintation build up
- percipitation runoff changed by the deforestation and grading already done and yet to be done related to community roads and structures, homesite, and golf course development
- diverted flow of water sources because of culverts and piping that prevent the natural absorbtion of waters in and around natural waterways
- diverted flow of water sources because of culverts and piping especially during times of excess percipitation as we experienced last week two to four inches of rain in just two days.

Who will be ACTIVELY monitoring the Cliff's adhearance to water/soil impact regulations? Because of limited access by local citizens, who will regularly oversee the impact of development activities both now and after development is completed? Why is the Cliffs not building bridges over the water/areas they want to cover to avoid the severe impact that would result from piping and culverting? Since guidelines that apply to less steep and even flat topography in other parts of the county/state obviously are inadequate for the steep mountain topography around the Cliffs development in Fairview and Swannanoa, is our area receiving specific protection for steep, mountainous environments?

Again, your protection of our homesites and the natural habitats surrounding us is critial. You have the power to protect the quality of and the future of our lives. **Please, PLEASE** ensure that our streams, springs, and wells – our lives as well as the wildlife around us - are protected.

Thank you -

Karen Snow

91 Rocky Fork Road

PO Box 2113

Fairview, NC 28730

Email: snowcase@msn.com

Home: (828)628-9224

Katherine Cross and Scott Hinkle 115 Mountain Creek Drive Swannanoa, NC 28778 336.601.6291

December 18, 2008

Re: 401 Permit Application by the Cliffs at High Carolina development

As residents of Swannanoa's Alpine Mountain development and immediate neighbors of the Cliffs at High Carolina, we are writing to express our concern about the above referenced proposed environmental alterations and to request, at a minimum, your utmost diligence in monitoring this development to ensure compliance with regulations.

An Alpine Mountain neighbor whose property is above ours has sent you pictures of heavy sedimentation in a stream that runs past their house, then by ours, and by other similarly impacted neighbors below. We have not ever seen this stream with so much silt in it in the past. This pollution is obviously due to the Cliffs development and is deteriorating the stream's water quality. It's bound to be adversely affecting the wildlife in and around the stream. This sediment pollution is evidence that the Cliffs is not using effective erosion control methods as required by law.

In addition to the already observed sediment pollution noted above, we are concerned about an increased likelihood of impacts to groundwater hydrology in our area, if this permit is granted. Already an unprecedented number of Alpine Mountain property owners' wells have gone dry since the Cliffs began blasting and moving earth in its clearing.

The Cliffs developer's approach has been to make unnecessarily large and detrimental alterations to the landscape, clearing out massive natural vegetative erosion control. The purpose for water quality and other environmental regulations is to prevent such huge-scale swaths of development, especially a golf course, in a mountainous region that's so fragile. This development can and must be done in a more environmentally friendly way. We ask that DWQ make sure that that is the case and, at least, require the Cliffs to submit a proposal that minimizes environmental impact as required by law.

We also request information as to enforcement of, and any non-compliance with, required water quality control measures. From researching the Cliffs history, we know that this developer has not always complied with regulations nor with its own commitments to best environmental practices. Please let us know how the Cliffs will be monitored during its development and to whom we should report any infractions which we observe.

Thank you for your consideration.

Clean Water for North Carolina

29 1/2 Page Ave Asheville, NC 28801



December 18, 2008

Cyndi Karoly N.C. Division of Water Quality 2321 Crabtree Blvd. Suite 250 Raleigh, N.C. 27604

Dear Ms. Karoly:

We greatly appreciate the Division taking the time and resources to hold a public hearing for the proposed 401 Water Quality Certification for the Cliffs Communities planned development (High Carolina) in the Fairview/Swannanoa area of Buncombe County. This letter for are Clean Water for NC's final comments on the proposed Certification.

We are concerned that the Division is considering allowing the applicant count the mandatory 30ft trout buffer, which they are required by local and state laws to protect, as "preservation." Counting this area as mitigation against their many impacts is insufficient and should not be allowed by this or any other applicant. Furthermore, restoration of the Shoals Falls Farm Site in Henderson Co. (Shoals and Crab Creeks) does little for the people of the Swannanoa and Fairview areas who will likely be affected greatly by this enormous development. The mitigation component of the application has not been adequately met.

We also find that the amenity of the golf course itself is not necessary. Their in no compelling reason why the Cliffs have to build the golf course when there are other amenities they can provide their residents (such as hiking or biking trails) that do not impact trout streams.

Finally, existing rules for DWQ's 401 Water Quality Certification program require DWQ to show that the cumulative impacts of a project is not likely to cause downstream water quality violations in the future. Loss of tree cover and construction on such a large scale is highly likely to result in degradation through sedimentation, chemical runoff, and increased frequency and flashiness of floods. Given the scale of the development project, the steep slopes where it is proposed, and the muddy water already documented running off the site, it is in violation of this policy to issue the a 401 Water Quality Certification to the Cliffs. Assuming a qualitative and/ or quantitative cumulative impact analysis has been performed, especially given the Trout waters in the area, we request a copy of that assessment.

Given the concerns outlined above, Clean Water for NC formally requests the Cliffs application for a 401 Water Quality Certification be denied.

Thank you for your time and consideration of these concerns, ~Gracia O'Neill

From: Sent: hamer220 [hamer220@bellsouth.net] Thursday, December 18, 2008 10:44 PM

To:

cyndi karoly; jay.zimmerman

Subject:

Cliffs at High Carolina permit request

Hello, We are residents of Fairview, NC in the Spring Mountain community. Our residence will be impacted by the future golf course. So we will list our concerns regarding their permit application. We are opposed to burying trout streams as part of the layout for the golf course. Instead we would encourage bridges be designed as needed in lieu of culverts over the golf course. We use a well for our water supply and are concerned about use of pesticides, chemical pollution and sediment pollution. The design submitted to you should include plans for drought and flooding that will "not" impact their surrounding neighbors quality of water and water table levels. I believe that the last news I heard on WLOS was that we are 10 inches behind in our water supply due to drought conditions. This has been clearly evident in out ponds, springs and streams. Our latest rainfall has not caught us up. Please consider these points as you review the Cliffs at High Carolina's permit application. Water is something that should not be taken lightly and impacts on the existing water supply needs to be seriously considered. Recreational design of a golf course should never negatively impact the surrounding land, streams, (trout streams), wells, springs, ponds and water supply.

Sincerely,

Mr. and Mrs. William L. Hamer 220 Dye Leaf Rd. Fairview, North Carolina 28730



29 N. Market St., Suite 604 Asheville, NC 28801 Ph: (828) 258-2023 Fax: (828) 258-2024 djgerken@selcnc.org

December 18 2008

Ms. Cyndi Karoly NCDENR, Division of Water Quality, 401 Unit 1628 Mail Service Center Raleigh, NC 27699-1628

Re: Cliffs at High Carolina – DWO Project # 07-0656

Dear Ms. Karoly:

These comments are submitted on behalf of the Western North Carolina Alliance and supplement comments previously submitted on behalf of the WNCA on August 8, 2008.

The Western North Carolina Alliance is a non-profit organization with the primary goals of protecting and preserving the natural environment and mountain streams of Western North Carolina. The members of the Western North Carolina Alliance are very familiar with the Swannanoa Mountains. The Buncombe County Chapter of the Western North Carolina Alliance includes members who reside in the Swannanoa and Fairview areas and many more who recreate in these areas and appreciate them for their scenic beauty, hiking, wildlife viewing, spiritual renewal, and other recreational and educational activities.

As we noted in our previous comments, DWQ cannot certify that the proposed activities will comply with North Carolina law. First, DWQ cannot issue a certification for culverting streams in order to construct the golf course because there are "practical alternative[s]" that would be less environmentally damaging. See 15 NCAC 2H .0506(b)(1). Second, no certification may be issued because the Cliffs' proposed mitigation plan, even as amended by its November 10, 2008 submission, as a matter of law, fails adequately to compensate for the stream impacts associated with road and golf course construction. Furthermore, as discussed in our prior submission, but not repeated here, no certification may be issued because the proposed activities will cause violations of North Carolina water quality standards.

DWO cannot issue a certification for activities to which there is a less damaging alternative.

DWQ cannot issue a § 401 certification for culverting streams if there is a "practical alternative[] ... which would avoid or result in less adverse impact to surface waters or wetlands." 15A NCAC 2H .0506(f). Among the alternatives that must be considered are "a reduction in size, configuration or density of the proposed activity and all alternative designs." 15A NCAC 2H .0506(f).

We are pleased that the Cliffs has taken another look at its project and found additional opportunities to avoid impacts to mountain streams in the construction of its mountaintop golf course. Despite reducing impacts, however, the Cliffs still plans to install lengthy culverts (as long as 1,000 feet) for purposes of achieving their ideal aesthetic design. There exist less environmentally damaging practical alternatives to the golf course design submitted by the Cliffs.

Most notably, the Cliff's has failed entirely to demonstrate that it cannot construct a high quality and profitable golf course that incorporates these streams into its design.

The Cliff's articulation of the basic project purpose must be rejected as overly narrow. The Cliffs has indicated that its basic project purpose "is to develop a viable high-end residential community with the most prestigious golf course in North America." Application at 11. On the basis of this improperly narrow articulation of the project purpose the Cliff's has rejected a range of practicable alternatives that would have involved the construction of a high-quality golf course but not, in the Cliff's assessment "the most prestigious golf course in North America." The Cliffs cannot so limit the range of reasonable alternatives. Even allowing that construction of a golf course is an appropriate element of the basic project purpose (it is not, see our prior comment submission), a more appropriate articulation of that purpose would be the "construction of a residential community with golf course amenity." That purpose can be achieved without impacting 2,879 feet of mountain streams.

A substantial portion, 1,000 feet or more, of the streams to be culverted under the Cliff's revised proposal will be piped to avoid a "forced carry" hazard. Other streams will be piped to facilitate wider greens and fairways and more gradual slopes to facilitate play for inexperienced golfers. The Cliff's has stated its desire to design a mountaintop golf course that is accessible to a wide skill-range of golfers and has suggested that a private golf community cannot succeed if the course is overly challenging and lacks "playability." These explanations fall short of the Cliff's burden to demonstrate that no practical alternative exists to these significant impacts.

The Cliff's has offered no analysis of the profitability of providing a more challenging golf experience incident to its development project. Without a profit/cost analysis of the market segments attracted to high end residential developments with challenging courses as compared to those attracted similar developments with more accessible courses, the Cliffs cannot demonstrate that a course that incorporates forced carry hazards and other challenges into its design would not meet its basic project purpose of creating a profitable residential development. Many highly-rated golf courses with profitable high-end residential developments market the challenge of their courses as a defining characteristic of their market niche. These preeminent golf courses have incorporated stream crossings into their design with great success and with the "forced carry" hazard, and its attendant challenge, affirmatively marketed as an attribute of the course. The following are some examples, with supporting materials attached.

1) Mountaintop Golf - Cashiers, NC - www.mountaintopgolf.com

This Tom Fazio designed course incorporates streams into the design of several holes. According to Mountaintop's marketing materials, Hole 6 features "a beautiful natural mountain stream: that "crosses between the tee and the fairway requiring a carry of at least 200 yards from the back tee." Similarly, Hurricane Creek "crosses the line of play" on hole 14. Mountaintop was named the 2008's best new golf course in the country by Golfweek Magazine.

2) Cornerstone Club - Montrose, CA - www.cornerstonecolorado.com

This Greg Norman designed course incorporates dry stream ravines into its design. According to Cornerstone's marketing materials, Hole 5 "plays over a dry stream ravine." Hole 15 features a green that "sits right-to-left along a dry stream bed that protects the left side." The left side of the green on Hole 17 is protected by a "dry stream bed."

Cornerstone has been named the #2 Best New Course in the United States by Golfweek Magazine. Golf magazine has named the Cornerstone golf course the #1 Best Private Golf Course in the United States for 2009 and called it "Greg Norman's finest North American project to date" and "easily the best high-altitude course in the nation, and quite possibly the world." Significantly, the magazine praised the course's incorporation of stream ravines noting that "[p]urists will appreciate the tough forced carries and greens that often demand run up approach shots." Significantly, this nationally recognized course is not known for its walkability.

3) <u>Creighton Farms – Middleburg</u>, VA – www.creightonfarms.com

Named by Golfweek Magazine as one of the top 10 new courses in 2009, this Jack Niklaus-designed course features "smallish greens, a healthy number of which require forced carries." The 482-yard 4th hole features a creek "that runs right in front of the green" according to the interactive map on the club's website.

4) Cross Creek - Temecula, CA - www.crosscreekgolfclub.com

This Arthur Hills-designed course is routed across creeks, incorporating them into its design.

According to the course's marketing materials, "[r]olling hills, rippling creeks and groves of age old oak and sycamore trees make the CrossCreek Golf Club a place of resplendent natural beauty." The course has received a 4 ½ star rating from Golf Digest magazine. The course affirmatively markets the challenging course-play introduced by inclusion of natural landscape elements in the course design. The following is taken from the course website:

You might enjoy the tinkling sound of a fresh water creek, but you won't be too happy if your ball lands in it. . . . Meanwhile, the steep hills create bold elevation changes that produce blinds shots to slick, tight greens. And the tree lined fairways and tees swallow shots make things difficult for players who can't keep it straight. . . . The natural hazards on the Arthur Hills designed course demand careful shot making, beginning on the first hole, a dogleg right lined with trees that requires a tee shot to the left to avoid a layup. The first five holes border Sycamore Creek. bringing water into play early. The most dynamic water holes are #9, a demanding par 4 with a large pond to the left of the green, and #17, the signature hole, a downhill par-3 that crosses a creek to an elevated green. . . . The par 5 7th, the longest hole on the course, plays into a breeze that increases its length. The 13th, a downhill dogleg par 4 demands an elevated tee shot across a deep valley. The 18th, a dramatic finishing hole, features a long uphill shot over a deep ravine to a well guarded green.

These examples of the many golf courses that incorporate challenging natural terrain as a design feature demonstrate that development of a high end golf community with a challenging golf course amenity featuring narrow greens, dramatic elevation changes, and multiple force carry hazards is an imminently practicable alternative to the design submitted by the Cliffs.

Beyond design alternatives for the course itself, the Cliffs has failed entirely to make the more basic case that it lacks a practical alternative to the construction of a golf course as its

chosen residential amenity. Our comments in our previous submission remain true. At the appropriate level of generality, the Cliff's objective for this project is to create a profitable residential development with desirable residential amenities in Buncombe County. Buncombe County is replete with examples of highly profitable residential developments that include amenities other than golf courses.

DWO cannot issue a certification because the proposed mitigation is inadequate.

DWQ cannot issue a § 401 certification unless the proposed activity "provides for replacement of [unavoidable losses of] existing uses through mitigation" 15 NCAC 2H .0506(b)(6) and (h). As noted above, many of the impacts associated with construction of the golf course are avoidable. Even if they were unavoidable, however, they would not be adequately mitigated.

The Cliffs has significantly revised its mitigation proposal and has made substantial improvements. As currently proposed, however, the mitigation plan falls short of the Cliff's legal obligation to mitigate for its stream impacts.

First, the Cliffs has understated its mitigation requirement. The Cliffs has proposed to mitigate for stream impacts at a 2:1 ratio. North Carolina requires mitigation at a 3:1 ratio for impacts to brook trout supporting watersheds. NC DENR 2003 Stream Mitigation Policy. Applying the appropriate ratio to impacts to Rocky Fork Creek caused by the golf course, the revised Cliffs proposal requires 10,977 SMUs, not the 8,098 SMUs indicated by the Cliffs. In addition, the Cliffs has discounted its proposal to preserve a 75 foot buffer around 5,674 linear feet of stream with a multiplier of 4. DWQ policy requires that preservation be discounted at a ration of 10:1. DWQ 2003 Stream Mitigation Guidance. Adjusting for discrepancy, the Cliffs total mitigation obligation is 11,828 SMUs.

Second, the mitigation offered by the Cliffs is inadequate. The original mitigation plan submitted by the Cliffs proposed to meet one-half of its stream impact mitigation obligation (6,149 of 12,298 SMUs) by "preserving" a 30 foot buffer along 30,746 feet of streams on-site. Corps Public Notice at 5. The Cliffs proposed to preserve that 30 foot buffer by placing it under deed restrictions.

In our previous submission, we commented that the 30 foot buffer offered by the Cliffs could not be counted towards its mitigation obligation because Buncombe County ordinances already provided a 30 foot buffer and DWQ defines "preservation" as "the protection of a relatively undisturbed stream and its associated buffer ... beyond that presently required by a regulatory program." May 2000 Interim DWQ Policy on Stream Mitigation Options ("DWQ Policy").

The 30' stream buffer that would be "protected" by the Cliffs' proposed mitigation plan is already protected from human development by the Buncombe County Stormwater Ordinance, Chapter 26, Article VII, Division 4, Section 2(b)(1)(d) and (2)(c), which requires that "[a]ll built-upon area shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters" and requires that subdivisions protect the buffer by recording deed restrictions or covenants. Similarly, the North Carolina Sedimentation Pollution Control Act ("SPCA"), NC Gen. Stat. 113A-57, provides that "[w]aters that have been classified as trout waters by the Environmental Management Commission shall have an undisturbed buffer zone 25 feet wide or of sufficient width to confine visible siltation within the twenty-five percent (25%) of the buffer zone nearest the land-disturbing activity, whichever is greater."

The Cliff's revised mitigation plan suffers from these same defects. When SMUs generated by preservation of a 30 foot buffer are removed from the Cliff's mitigation plan, the Cliffs is 2,630 SMUs short of its mitigation obligation, even accepting the Cliffs' calculation that it is only required to mitigate for 8,098 SMUs. Based on the more accurate 11,828 SMU stream mitigation requirement noted above, the Cliffs' revised mitigation proposal is 6,360 SMUs short of meeting its mitigation obligation.

The 30 foot buffer proposed by the Cliffs is not preservation and the application must be denied until the Cliffs revised its mitigation plan to meet its full mitigation requirement under the law. When the Cliffs revises its mitigation plan to comply with the requirements of North Carolina, no more than 10% of its total mitigation proposal can be met through preservation. DWQ Policy; Corps Public Notice at 5. Moreover, when preservation is allowed, buffers must be at least 50 feet on either side of the stream. Id.

Conclusion

For the foregoing reasons, and for the additional reasons discussed in our prior comment submission, DWQ must refuse to issue a § 401 certification.

Sincerely,

Austin DJ Gerken Southern Environmental Law Center 29 N. Market St., Suite 604 Asheville, NC 28801 Counsel for

A Lorken

Western North Carolina Alliance, Julie Mayfield, Executive Director 29 N. Market St., Suite 610 Asheville, NC 28801

Golfweek's Best New Courses unveiled

By BRADLEY S. KLEIN

Senior Writer

Few courses are opening in the U.S. these days, but the ones that are debuting are pretty good. They had better be if they are to stand a chance.

With the golf market more competitive than ever, owners and designers know they have

to deliver quality and value to establish a toehold and draw play.

Our No. 1 new course, Mountaintop, in Cashiers, N.C., certainly does that. Set in a residential community, this high-end private club designed by Tom Fazio is built on a rugged site. Yet even with 300 feet of elevation change, it remains walkable and playable, largely because Fazio confined the uphill transitions for the land between greens and the next tees, while the steepest downgrades are reserved for the carry areas immediately fronting tees.

Not every course on this list is high-end. Part of the appeal of our No. 45 new course, Bandon Crossings in Bandon, Ore., is precisely that the inland layout designed by Dan Hixson is modestly priced and readily accessible—in contrast to the fully booked and more expensive links-inspired trio of courses at nearby Bandon Dunes Resort.

One of our courses represents a "blow up and start over" project. The Champions Course at TPC Scottsdale (Ariz.), ranked No. 41, is a total overhaul of the 20-year-old TPC layout that sat there. So thorough a renovation did architect Randy Heckenkemper undertake that we consider it a new course.

It will be interesting to see how many of these 50 rookies crack the top 100 of our *Golfweek's* Best Modern list, which is published each March. One already has done so: Chambers Bay in Tacoma, Wash. It's hard to know which debut is more impressive: its No. 3 on the Best New list or No. 17 position on the 2008 *Golfweek's* Best Modern list.

Not that we're alone in our esteem for this Robert Trent Jones Jr. layout that sits on Puget Sound. Still in its infancy, Chambers Bay already has been tapped by the U.S. Golf Association to host the 2010 U.S. Amateur and the 2015 U.S. Open.

As an early judge of talent, Golfweek is not alone.

THE LIST

How we did it: Golfweek defines new courses as those having opened in the past two calendar years (2007-2008). This is done to five the Golfweek's Best panel of raters enough time to visit courses, thereby making the ratings statistically valid.

COURSE

1. Mountaintop

LOCATION

Cashiers, N.C.

•		
1	Cornerstone	

3. Chambers Bay Golf Course

4. Golf Club of Cape Cod

5. Cougar Canyon Golf Links

6. The Preserve Golf Club

7. Tetherow

8. Colorado Golf Club

Club at Irish Creek

10. Sugarloaf Mountain Town & Country Club Minneola, Fla.

11. Martis Camp

12. Gozzer Ranch Golf & Lake Club

13. Highland Course at Primland

14. Blue Ridge Shadows Golf Club

Palouse Ridge Golf Club

16. Promontory - Jack Nicklaus Course

17. Golf Club at Gray's Crossing

18. Adam's Mountain Country Club

19. Creek Club

20. TPC San Francisco Bay at Stonebrae

21. Lake Presidential Golf Club

22. Creighton Farms

23. Timilick Tahoe

24. Hasentree Golf Course

25. Juliette Falls Golf Course

26. Long Shadow Golf Club

Eagle Falls Golf Course

28. Butterfield Trail Golf Club

29. Federal Club

30. Indian Wells Golf Resort - Players Course

31. Ocean Ridge – Leopard's Chase

32. Harmony Club

Cliffs at Keowee Falls

34. Cottonwood Hills Golf Club

35. Blue Top Ridge

36. Founders Club

37. The Home Course

38. Olivas Links

39. Sevillano Links

40. Trinitas Golf Club

41. TPC Scottsdale - Champions

42. Quarry Golf Club

43. Canvon River

44. Brasada Ranch

45. Bandon Crossings

46. Bella Collina

47. Golf Club of Kansas

48. Providence Golf Club

49. Stowe Mountain Club

50. Champions Pointe Golf Club

Montrose, Colo.

University Place,

Falmouth, Mass.

Trinidad, Colo.

Vancleave, Miss.

Bend, Ore.

Parker, Colo.

Kannapolis, N.C.

Truckee, Calif.

Arrowpoint, Idaho

Meadows of Dan, Va.

Front Royal, Va.

Pullman, Wash.

Park City, Utah

Truckee, Calif.

Eagle, Colo.

Oconee, Ga.

East Bay Hills, Calif.

Upper Marlboro, Md.

Aldie, Va.

Truckee, Calif.

Wake Forest, N.C.

Dunnellon, Fla.

Madison, Ga.

Indio, Calif.

El Paso, Texas

Glen Allen, Va.

Indian Wells, Calif.

Sunset Beach, N.C.

Timnath, Colo.

Salem, S.C.

Hutchinson, Kan.

Riverside, Iowa

Pawleys Island, S.C.

DuPont, Wash.

Ventura, Calif.

Corning, Calif.

Stockton, Calif.

Scottsdale, Ariz.

Canton, Ohio

Missoula, Mont.

Powell Butte, Ore.

Bandon, Ore.

Monteverde, Fla.

Lenexa, Kan.

Davenport, Fla.

Stowe, Vt.

Henryville, Ind.

Community Residences Golf Club Services Lodge Clubhouse Developer News Contact

Course Tour Tom Fazio Golf

Golf

Considered by many to be the finest golf course designer of modern times, Tom Fano, aresident of neighboring Hendersonville, NC, has crafted a true masterpiece at Mountaintop.

has redied a true masternace at Mountaintop Mr. Fario has spent in any hours walking the hills and woodlands of Mountaintop to snaure the course flows scamlessly with the natural topography and takes thill advantage of the challenges and beauty presented by Mountaintop's dramatic terrain, majestic hardwoods, natural springs and sweeping views. The result is a truly impried Carolina countain ones of fernaces at the defits. mountain core-golf experience that defily balances challenge and strategy with playability. Thus the course is capable of proyecting the game's best players while providing a thr. Fair day of golf for higher-hundress players and function Reserved for play solely by Mountaintop's

350 equity members, their femilies and meted guests, the golf club exudes the friendly ambiance and genteel charm befitting ste Carolina hezitage:







Straight from the oven to the tee!

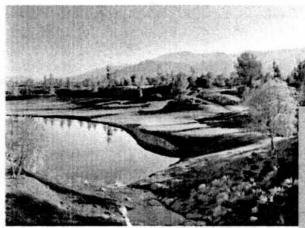
Mountaintop is pleased to after inembers a task strack straight from our brack over. Your favorite frield pieza pies are prepared daily each afternoon and are quickly paining a reputation as the areas bent! So while you're out to some your stills on the same, order one of our again-to-be famous prezas delivered straight to some tre for you and your friends to emoy? Mountainton is pleased

LOGIN Will Hill

Community Residences Golf Club Services Lodge Clubhouse Developer News Contact

Course Tour Tom Fazio Golf

to additional into Camabi Mark Crafts of Specificating Optionics Cology. In this work Land Compagned



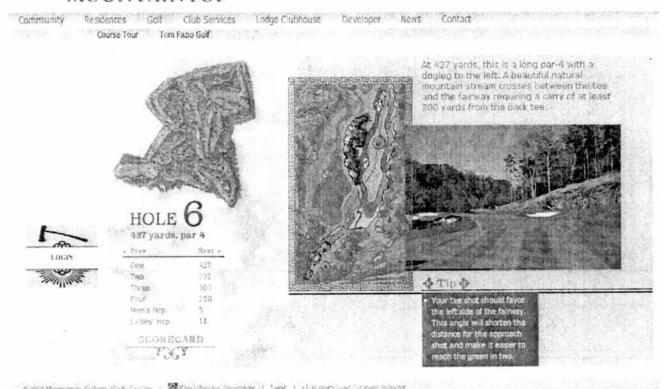


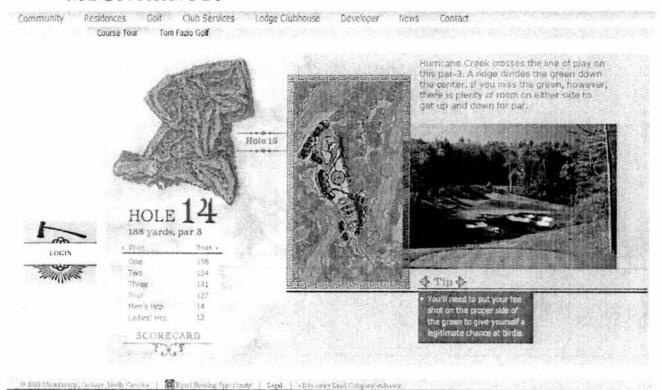
With five of his courses ranked among the Top 100 in the World and recognized by his peers as the one of the world's preeminent golf course designers. Tom Farro participates in only the finest projects and with only the highest quality developers. This is the 6th golf course that Tom has designed for Discovery Land and one that he considers as one of his finest. Given that it is just a short drive from his home in Hendersonville, NC, he personally spent many hours on site crafting. Mountaintop's features and strategy.



The Farin Philamphy

in creating his course, Mr. Fario honors a commitment to quality as well as the unique character and natural beauty of each setting. He gracefully malds the golf course into the natural terrain to give golfers of all abilities an exciting challenge and a sense of tradition and greatness. The Mountaintop course perfectly reflects the Famo philosophy, naturally







THE CLUB HOMESTEADS

COL

FRONTIER LIFE

NEWS

ABOUT US

"#1 Best New Private Course in the U.S."

Golf Magazine, January 2009

"#1 Best New Course in Colorado, #2 Best New Course in the U.S."

Golfweck Magazine, October 2008

GOLF COURSE OVERVIEW
GREG NORMAN DESIGN
INDECTOR OF GOLF
DISECTOR, WOMEN'S GOLF
HOLE BY HOLE
PRACTICE FACILITY
GIFY GOLF
WOMEN'S GOLF
CAPORE PROGRAM
YARDACE GUITS
THIS TROMOUR FROS

I can make this comment right here and now, this is by far the liest mountain golf churse in the world. It's easy to throw around the accolades and statements like thist. But I've played a lot of great golf courses. And when you come and see the end result here at Cornectione, it's truly a diceam-come true."

Greg Norman

Greg Korman Golf Course Design

Greg Norman has walked this land many times. And many times more, the rulling tripography here has proven to be an eager canvas for bluman's master touch. Thanks to "burnan's "least disturbance" rasign philosophy, the Cornerstone golf course is remarkable - so natural that one intuitively knows that the layout wasn't - o much built, as discovered.

Dy neistane named #1 Best New Private Course in the U.S. by Golf Hagazine

cornerstanciado à ectricia vivia colorado com \$11.855/7.273

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Go to Special Section

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The Top 10 New Private Golf Courses

By Joe Passov Senior Editor (Courses/Rankings) Published: January 01, 2009

1. Cornerstone Club Montrose, Colo. 7,945 yards, par 72 cornerstonecolorado.com

Cornerstone — Greg Norman's finest North American project to date — is easily the best high-altitude course in the nation, and quite possibly the world. Set on the Uncompander Plateau in southwestern Colorado, Cornerstone is pure mountain golf, with jaw-dropping vistas and bunkers dotted with elk tracks.

Purists will appreciate the tough forced carries and greens that often demand run-up approach shots, and the fast greens and shaved surrounds even things up for players of all abilities. The 9,213-foot altitude might make you think twice about walking Cornerstone, but you definitely won't hesitate when it comes to playing it twice.

2. Trump National Bedminster (New)

Bedminster, N.J. 7,534 yards, par 72 trumpnational.com

The second course at Bedminster is an out-and-out triumph for "The Donald." Only a paucity of in-your-face natural drama kept this from the top spot. In contrast to Trump's Top 100, Tom Fazio-designed Old course here, the New is exudes an Old World feel, with stylish bunkering, small, brilliantly contoured greens and tremendous variety throughout, with a near-perfect blend of open and wooded holes. Trump and Understatement are seldom mentioned in the same sentence, but he has succeeded here on crafting a modern course worthy of a national stage.

3. Sugarloaf Mountain Golf & Town Club

Minneola, Fla. 7,057 yards, par 72 themountain.cc

Master minimalists Bill Coore and Ben Crenshaw, who topped our 2007 Top Private Course list with Colorado Golf Club, ventured to the other side of the country for their latest effort-yet remained in the mountains all the same. Situated 40 minutes west of Orlando on shockingly hilly terrain for Florida, with more than 250 feet of elevation changes, Sugarloaf Mountain offers heavily sloped fairways and the occasional blind tee shot, as well as a healthy mix of very short and very long par-3s and 4s. Oaks, firm, fast greens, a variety of bunkers and views

of Lake Apopka add further character to this unusual course.

4. Rock Creek Cattle Company

Deer Lodge, Montana 7,466 yards, par 71 rockcreekcattlecompany.com

Some panelists felt this Tom Doak design was his best work since Pacific Dunes, while others were less inclined to laud, owing to the severely contoured greens. Still, the consensus is that this firm, fast, undulating layout that's surrounded by an 80,000-acre working ranch is superbly routed, with majestic scenery and inspired bunkering. The 435-yard, par-4 opener, with its split fairway and the 598-yard, par-5 closer, which plays from a rock cliff overlooking a trout stream, with the snow-capped Tetons in the backdrop, bookend a terrific round.

5. Martis Camp

Truckee, Calif. 7,707 yards, par 72 martiseamp.com

Stamp Tom Fazio's typically gorgeous fairway and bunker shaping on a pine-studded mountain property in the Lake Tahoe region and you have a potent combination when it comes to scenery and playability. Course buff and 2-time U.S. Open champ Lee Janzen called it the best Fazio course he's ever played. With holes such as the 468-yard, par-4 18th, its green backdropped by a boulder pile and by forested mountain peaks beyond, it's easy to see why.

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- Donald Trump has major plans for his new courses (@Courses and Travel)
- Best New International Courses 2008 (@Courses and Travel)

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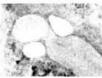
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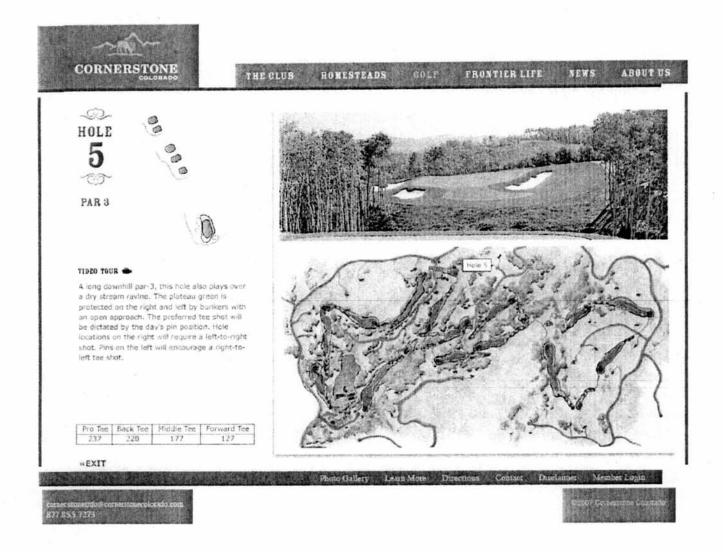
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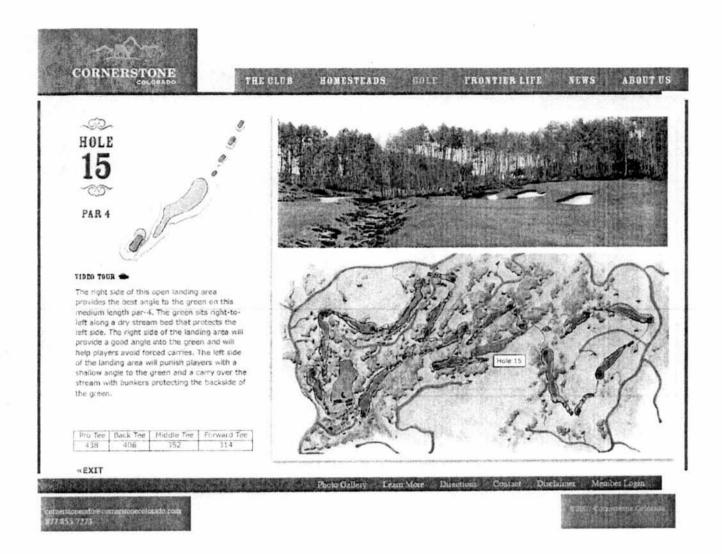


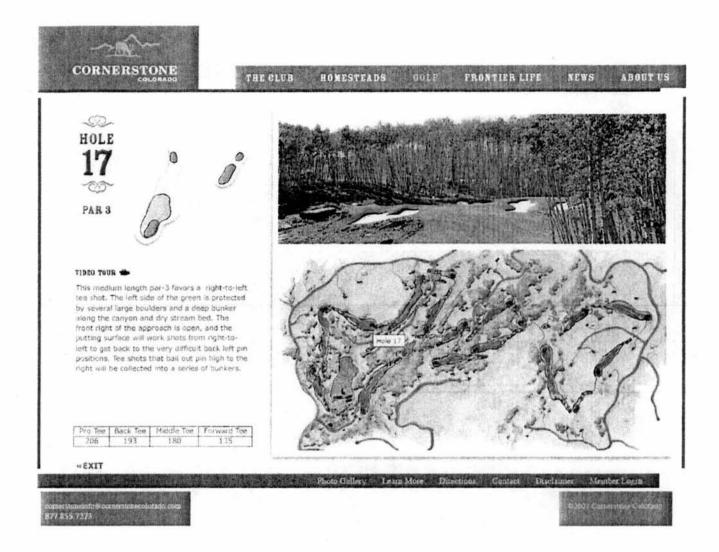
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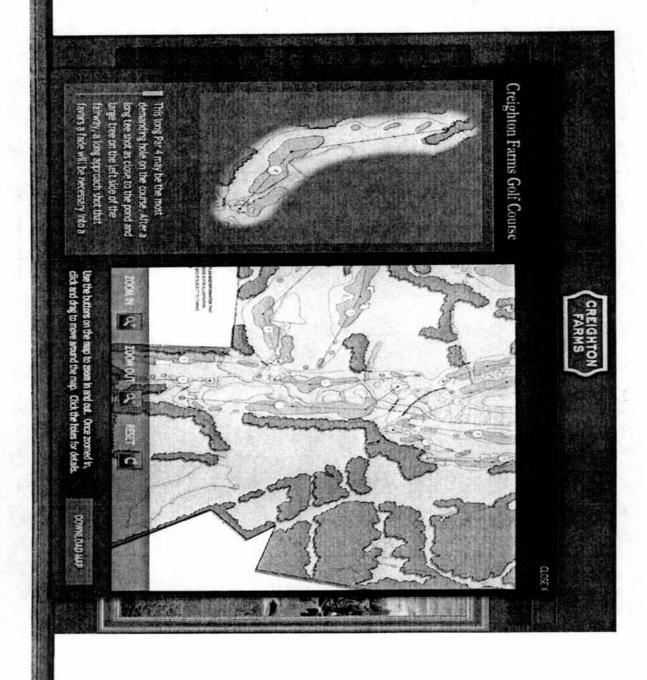




Creighton Farms



Creighton Farms Page 1 of 1





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The Top 10 New Private Golf Courses

By Joe Passov

Senior Editor (Courses/Rankings) Published: January 01, 2009

6. Ritz-Carlton Golf Club

Creighton Farms Aldie, Va. 7,410 yards, par 72 creightonfarms.com

Jack Nicklaus has returned to his fire-breathing, go-go '80s design style in with a bang, fashioning a golden grizzly that's rated 77.0 and sloped 152 from the tips. Most of the trouble comes on and around the smallish greens, a healthy number of which require forced carries. The lake- and creek-guarded 482-yard, par-4 4th highlights the premium on the aerial game. If flying it in successfully isn't working, you can always head for Washington D.C.'s Dulles International Airport, 10 miles down the road.

7. The Cliffs at Keowee Springs

Six Mile, S.C. 7,100 yards, par 72 cliffscommunities.com

The latest installment in the hugely successful Cliffs family is this gently rolling Tom Fazio mountainside layout that sports player-friendly features such as saddle-shaped fairways that help funnel balls back into play and soft, nicely flowing green surrounds. Still, there's plenty of bite to be had, such as the drama-filled tee shot at the 558-yard, uphill par-5 8th and via the brute strength required to conquer the 492-yard, uphill par-4 18th. While the back tee slope of 141 shows that Keowee springs is hardly a pushover, it's just the kind of comfortable spread that makes it a terrific "every day" course -- except that at the Cliffs, you members can play a half-dozen others as well.

8. Rainmakers

Alto, N.M. 7,200 yards, par 72 rainmakersusa.com

Situated near the high-altitude horse racing mecca of Ruidoso, New Mexico's first Audubon Signature course is an environmentally sensitive Robert Trent Jones II design that darts through sagebrush and juniper. Rocks and underbrush practically swallow up the landing zones on the front nine, so course management is at a premium, but so are superb views of the Capitan and Sierra Blanca, nor more so than at the question mark-shaped, 630-yard, par-5 1st hole.

9. The Idaho Club

Sandpoint, Id. 7,000 yards, par 72 theidahoclub.com

Way up in Idaho's panhandle, north of Coeur d'Alene, Jack Nicklaus has weaved a stunning tapestry that overlooks one of the state's most pristine lakes, Lake Pend Oreille atop an old public layout that nobody wanted. The combination of forests, lake views and Nicklaus' penchant for stirring risk/reward holes have breathed serious new life into the property.

10. Encanterra

Queen Creek, AZ 7,250 yards, par 72 encanterra.com

Forty miles southeast of Phoenix, Tom Lehman carved out extra-wide fairways and few forced carries to allow the middle-handicapper to smash his driver about, but he used intricate contouring on and around the greens to place a premium on intelligent approach play. Mountain backdrops ring most of the holes, and they're especially appealing on those holes that run to the north, but it's the cleverly crafted green complexes that elevate Encanterra.

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From:

Monroe Gilmour [mgilmour@buncombe.main.nc.us]

Sent:

Tuesday, December 16, 2008 3:14 PM

To:

<cyndi.karoly@ncmail.net>

Subject:

Cliffs High Carolina Permit Comments

Dear Mr. Zimmerman and Ms Karoly,

Thank you for conducting the Public Hearing regarding the Cliffs Communities Permit application. I am writing to confirm what I said at the hearing:

- -We in the public depend on you to be our eyes and to protect the environment as per the law.
- -I urge you to do that in this case. It does appear that the permit has serious problems.

Thank you.

Best

Monroe Gilmour

PO Box 1341

Black Mountain, NC 28711

828-669-6677

828-669-8862 fax

mgilmour@main.nc.us

From: William Boyd [boydmiller@bellsouth.net]
Sent: Tuesday, December 16, 2008 4:29 PM

To: Cyndi.Karoly, Loretta.A.Beckwith; john.hennessey, Rebecca Williams; Gracia O'Neill

Cc: Carmin Wagner; Katherine Cross; Jennifer Taylor; francois manavit

Subject: The Cliffs at High Carolina Silt Infiltration

Attachments: 12-11-08 012.jpg; 100_0140.JPG; 100_0146.JPG

The Cliff's at High Carolina's application needs to be denied and request them to resubmit one that can protect our waters.

If you remember at the public hear on November 18, 2008 concerning the Cliff's application for variance at High Carolina, the Cliff's contractors all said how great they were about protecting the environment from among other things, silt infiltrating streams. The problem isn't about good intentions. The problem is the pragmatic one of actually doing it. As the pictures below show, silt did infiltrate our streams during the recent rains. The Cliff's good intentions cannot protect them from damaging our environment and destroying our water. The problem is their development and construction plan. They may want to do the right thing but they can't pull it off. Their plan needs to be modified and there needs to be oversight to hold them accountable for the destruction they will cause.

See the photos below taken during the most recent storm. The Cliff's can't protection us. The Cliff's aren't preventing silt from damaging our streams. These streams are fragile. It won't take much silt from turning our streams into meadows or a muddy mess.

Bill Boyd Alpine Mountain

From: Sent: William Boyd [boydmiller@bellsouth.net] Wednesday, December 17, 2008 7:30 AM

To:

iohn.hennessv

Subject:

Fwd: The Cliffs at High Carolina Silt Infiltration

Begin forwarded message:

From: William Boyd < boydmiller@bellsouth.net > Date: December 16, 2008 4:28:47 PM EST

To: Cyndi.Karoly@ncmail.net, Loretta.A.Beckwith@saw02.usace.army.mil, john.hennessey@ncmail.net, Rebecca Williams

<serpentchild@earthlink.net>, Gracia O'Neill <gracia@cwfnc.org>

Cc: Carmin Wagner < cpwagner @bellsouth.net>, Katherine Cross < kernersvillekath@aol.com>, Jennifer Taylor < deely@bellsouth.net>,

francois manavit < francois@redherringpuppets.com > Subject: The Cliffs at High Carolina Silt Infiltration

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Bill Boyd Alpine Mountain





APPENDIX D

Request for Additional Information Letter Dated January 16, 2009

The Cliffs at High Carolina



Dee Freeman, Secretary North Carolina Department of Environment and Natural Resources

> Coleen H. Sullins, Director Division of Water Quality

January 16, 2009

DWQ Project # 2008-0880 Buncombe County

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Mr. Don Nickell The Cliffs Communities 3598 Highway 11 Travelers Rest, SC, 29690

Subject Property:

The Cliffs at High Carolina

Ut to Swanannoa River [040302,6-7-8, C]
Ut to Licklog Branch [040302,6-7-8, C]
Ut to Flat Branch [040302,6-7-8, C]
Rocky Fork [040302, 6-57-4, C, TR]
Ut to Ellison Branch [040303, 6-57-4, C, TR]

Ut to Ellison Branch [040302, 6-57-4, C, TR] Ut to Cane Creek [040302, 6-57-4, C, TR]

REQUEST FOR MORE INFORMATION

Dear Mr. Nickell:

On November 18, 2008, the Division of Water Quality (DWQ) conducted a Public Hearing related to your application to impact 0.219 acres of wetlands, 0.03 acre of open water and 6,149 linear feet of streams in order to construct the proposed subdivision and golf course. Based upon technical review of your application materials, along with concerns relayed during the Public Hearing, DWQ has determined that the information itemized below will be necessary in order for us to continue to review your project. Please provide <u>five</u> copies of the additional information requested below, and be advised that your application will remain on hold as incomplete until we receive this information. If we do not receive the requested information, your project will be formally returned as incomplete.

Additional Information Requested:

General Questions/Comments

Temporary/Construction Impacts

The impacts, as presented in the application, appear to be focused on the post construction impacts, but fail to elaborate on the impacts that will occur during construction. As an example, all of the post construction road crossings describe the amount of fill that will occur in the streams. However, there is no discussion on the anticipated impacts that may occur during construction from activities such as how to gain access to the stream, need for equipment in stream buffers or the stream itself, construction techniques, the placement of bridge footers in the stream, stream diversions during construction, etc. Please provide any additional information on impacts that may occur during construction. At a minimum, we will need to see any impacts that may occur due to: 1) the need for equipment access to streams, stream buffers, wetlands, or any other waters of the State (including any temporary stream crossings), 2)

401 Oversight/Express Review Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
2321 Crabtree Boulevard, Suite 250, Raleigh, North Carolina 27604
Phone: 919-733-1786 / FAX 919-733-6893 / Internet: http://h2o.enr.state.nc.us/ncwetlands

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any grading or clearing of stream, stream buffers, wetlands, or any other waters of the State beyond the proposed impact areas (including clearing of vegetation), 3) any stream diversions or temporary in-stream dams, and 4) any other activity that may occur during construction that could result in impacts to streams, stream buffers, wetlands or any other waters of the State.

Downstream Protection (Instream Rip Rap & Cross Vanes)

At present, the proposed impacts for the project (including all the road crossings as well as the golf course) appear only to include the impacts from the placement of the culvert. They do not appear to include the impacts that will be required for energy dissipation downstream of installed culverts. Please revise your impacts to include: 1) the previously requested construction-related impacts, 2) the post construction (i.e. permanent) impacts due to the placement of the culvert, and 3) any downstream channel protection such as in-stream rip rap placement or in-stream cross vanes.

Pond Management & Irrigation

It is not clear from the review of the application how the pond located on site will be used for irrigation. It appears that the pond will be used as a source for irrigation of the golf course. However, there appears to be no provision in the application for maintaining a minimum pool depth in the pond. The pond is a classified surface water with corresponding water quality standards. Moreover, the streams that drain into the pond support known existing uses including active populations of brook trout. Thus, any use of the pond for irrigation will have to be performed in such a manner so as to maintain those existing uses. A minimum pool requirement along with other protective measures to ensure that the existing uses of the streams and pond are protected will be required. Please explain how you intend to use the pond for irrigation purposes.

Cumulative Impact Analysis

The qualitative analysis presented in your application states that the project will not result in any impacts from induced growth. However, at the public hearing those supporting the development indicated that their support was, at least, partially due to the positive economic effects that the project would have for the area. Thus, your application seems to be incongruent with comments presented at the public hearing. Given the size of the project, it seems reasonable to expect increased economic activity in the area to support those living in the development and using the golf course. Thus, DWQ feels that additional information relating to the potential for cumulative impact should be presented. It should be noted that DWQ does not believe that a quantitative analysis of the potential impacts is necessary. However, an expanded qualitative analysis that discusses the water resources and their corresponding classifications in the general (local) area around the development is needed. In addition, a review of any proposed or new building permits (for the local area around the development) for industries planned for the area to support the increased population (such as supermarkets/strip malls, gas stations, etc.). If specific examples of additional proposed developments are not available, then a more generalized discussion on the types and amounts of ancillary development that might occur in the area would be appropriate. Finally, a discussion of the multitude of existing federal, state, and local laws, statutes, and regulations that are presently in place to protect the water resources of the area should be presented. If you have any questions or require in assistance in developing this analysis, please feel free to contact John Hennessy at 919-807-6377, or email him at john.hennessy@ncmail.net.

Golf Course Design Questions/Comments

Hole #1

£ , -

Based on your meeting with the Division of Water Quality (hereby known as DWQ) on January 9, 2009, we better understand the reasons why the applicant desires the stream fill around the first hole tee and practice tee area. While the discussion from the meeting was helpful in DWQ's understanding, we will need a more detailed discussion, submitted in writing that explains the applicant's rationale for the impacts. Please include in your discussion an examination of potential engineering practices that might be used to reduce impacts such as soil lifts, etc. In addition, please describe why a rerouting of hole #9 could not be performed to minimize impacts to impact sites 27 and 32.

Hole #4

See previous comments on the proposed bridge crossing of the stream about identification of construction impacts for cart path crossings. Please identify, quantify, and discuss the need for any proposed impacts for the construction of the bridge project. The list of potential impacts include, but may not be limited to, any impacts from construction-related access (equipment or haul roads), temporary placement of fill in the stream, stream diversions, slope stabilization practices, or impacts to stream buffers.

Hole #6

See comments on Hole #4 about identification of construction impacts for golf cart crossings of streams with bridges. While the discussions we had on January 9, 2009 were helpful in our understanding, we will need a detailed explanation as to why this fill is necessary. Please submit a written explanation that recants what was discussed at the meeting and details the need for this impact.

Hole #7

Please describe the rationale for the proposed fill on this hole. While the discussions from the meeting on January 9, 2009 were helpful in DWQ's understanding, DWQ will need a detailed explanation as to why this fill is necessary. Please describe the rationale for this proposed impact. In particular, please describe the ramifications to your design, as well as the resulting changes to impacts elsewhere on the project, if this impact were not allowed by the 401 Water Ouality Certification.

Hole #8

The application lacked any explanation for the proposed impact. It appears that the proposed design can be changed to reduce impacts to the pond. Please discuss the need for this impact, or alter your design to eliminate or reduce the impacts.

Hole #9

See comments on Hole #4 about identification of construction impacts for golf cart crossings of streams with bridges.

Hole #10

See comments on Hole #4 about identification of construction impacts for golf cart crossings of streams with bridges. In addition, please explain why the impacts to the stream on this hole are necessary. It appears that the stream in question could be used played over and still not interfere with the integrity of the hole. Also, please explain why the impacts to site #30 are necessary.

Hole #11

Review of the application reveals the potential for moving the cart path and the tees toward Hole #17 to reduce potential impacts. While the discussions from the meeting on January 9, 2009 were helpful in DWQ's understanding, DWQ will need a detailed explanation as to why this fill is necessary. Please submit a written explanation that recants what was discussed at the meeting and details the need for this impact.

Hole #12

While the discussions we had on January 9, 2009 were helpful in our understanding, we will need a detailed explanation as to why this fill is necessary. Please submit a written explanation that recants what was discussed at the meeting and details the need for this impact. In your explanation, please provide a discussion that explains the need for the impacts for this hole and corresponding cart path if the 15th hole is ultimately relocated north to minimize stream impacts (see comments for the 15th hole below).

Hole #15

While the discussions we had on January 9, 2009 were helpful in our understanding, we will need a detailed explanation as to why this fill is necessary. Please submit a written explanation that recants what was discussed at the meeting and details the need for this impact. Please include in your explanation why the hole could not be shifted north to avoid or minimize impacts to streams. It appears that the northern boundary of the "golf course envelope" bounds the hole to the north with potential lots located to the north. Please be advised that DWQ views that boundary as an artificial construct that could potentially be relocated if needed to minimize stream impacts. However, if other design or construction constraints are limiting the possible movement of the hole to the north, then please provide that detailed explanation.

Onsite Mitigation

The discussions on January 9, 2009, provided DWQ with a better understanding of your proposal for onsite stream mitigation by preserving stream buffers throughout the site. However, before we can approve any proposed buffer preservation, we will need to review and approve a conservation easement that protects those streams from encroachment in perpetuity. Moreover, the applicant (and/or present landowner if different), will need to place appropriate deed notifications and restrictions on the affected property to ensure the long term protection of those streams.

Offsite Mitigation

Shoal Falls Farm Mitigation Site

Wetland Area 2

In reviewing the application it was unclear what was being proposed for this site. Please provide a greater detail of explanation and perhaps mapping to clarify the proposed work at this site.

In-stream Structures

At present, the plan provides a discussion on the need and potential for in-stream structures such as cross vanes, j-hooks, and log vanes. However, there is no map that shows the location for the placement of these structures in the stream. While DWQ understands that modifications to these locations may need to occur during construction due to unforeseen problems, the application needs to show their anticipated location along with corresponding station numbers and stream profile. Please provide a plan that shows where all the in-stream structures are to be located for the proposed stream restoration plan, along with corresponding station numbers and stream profile. If the applicant wishes to include a proposed adaptive management proposal to allow for minor changes of design during construction, please include the proposed language in your submittal.

Sediment Transport Analysis

The proposed stream restoration included no sediment transport data for the proposed restored reach. Please provide a complete sediment transport analysis for the proposed reach. If you have any questions about what is required, please contact John Hennessy at 919-807-6377, or by email at iohn.hennessy@ncmail.net.

Stream Monitoring

The proposed monitoring regime is acceptable.

Success Criteria

The success criteria proposed in your application is vague. In your submittal of additional information, please add language to the application that requires written approval from DWQ and the Army Corps of Engineers before a site is deemed successful.

Conservation Easement

We could not find any proposed conservation easement for the proposed mitigation site. Please provide a proposed conservation easement for our review and approval.

Stream Enhancement I

The plan discusses the proposal for performing stream enhancements to Shoal Creek. The written application describes the plan as stream enhancement I, whereas the map (legend) describes the plan as stream enhancement II. Please clarify for it will affect the authorized mitigation ratios. In addition, the application does not provide any specific data about the proposed nature and location of the proposed stream enhancements. The application discusses alterations to the stream dimension and profile and changes in land practices. However, no further detail is given. Please provide additional information about the specific proposed enhancements. Please include a map showing the locations of the proposed enhancements, and a discussion that describes what is to be done at each enhancement location. As an example, if a particular meander bend is to have an in-stream structure added, reshaping of the stream bank is necessary, and riparian vegetation must be planted, then please locate that section of the stream on a site map and describe the work to be done at that location. This information is necessary to determine that the proposed work is acceptable and will result in a stable stream as well as allow for the proper calculation of mitigation ratios. The application, at present, proposes 1:1 credit for the stream enhancement sites. As you may be aware, 1:1 credits are usually reserved for complete stream restoration (pattern, dimension, profile, etc.). It is unlikely that the proposed 1:1 mitigation credit proposed for the enhancement areas of this site will be allowed by DWQ. A higher ratio of 2:1 or even 3:1 may be used instead. After you provide the additional information, DWQ will be available to discuss those issues with you.

Please direct any questions you may have on the golf course related comments or the mitigation comments to John Hennessy at 919-807-6377, or email to john.hennessy@ncmail.net.

Geomorphologic Data

Review of the application for the proposed stream restoration site indicates much of the information required for approval was present. However, there was additional data for the existing and proposed stream reaches that DWQ will need to review in order to make a final decision on the site. In addition, no reference reach data was provided. Thus, in an effort to simplify the request and response process, we have provided a table below for you to complete. Please provide the following geomorphologic data (listed below) for the existing stream reach, the proposed stream reach, and an appropriate stream reference reach.

Variables	Existing Channel	Proposed Reach	Reference Reach
1. stream type			
2. stream length			
2. drainage area			
3. bankfull width (Bkfw)			
4. bankfull bench width			
4. bankfull mean depth			
5. width/depth ratio			
6. bankfull cross-sectional area			
7. bankfull mean velocity			<u> </u>
8. bankfull discharge, cfs			
9. bankfull max depth		ļ	
10. width of floodprone area			
11. entrenchment ratio			
12. meander length			
13. ratio of meander length to Bkfw			
14. Radius of curvature			
15. Ratio of radius of curvature to Bkfw			
16. Belt width			<u> </u>
17. Meander width ratio			
18. Sinuosity (stream length/valley length)			
19. Valley Slope			
20. Average slope			
21. Pool slope			
22. Riffle Slope			
23. Ratio of pool slope to average slope			
24. Maximum pool depth			
25. Ratio of pool depth to average bankfull depth			
26. Pool width			
27. Ratio of pool width to Bkfw			
28. Pool to pool spacing			
29. Ratio of pool to pool spacing to Bkfw			
30. riffle length			
31. pool length			
32. Minimum Bankfull Bench Width			
33. Ratio of lowest bank height to bankfull height (or max bankfull depth)			

Groundwater Related Comments

- Submit a map of sufficient scale to identify all water supply wells and springs located within 1500 feet of the perimeter of The Cliffs property line. The map should provide topographical information and be keyed to a table providing information concerning the property owner and mailing address.
- 2. Identify the types and quantities of chemicals to be used on the golf course and surrounding grounds such as fertilizers, herbicides, fungicides and pesticides. If this information is not currently known, provide a list of chemicals and quantities used at other facilities owned by the applicant that are used for the purpose of maintaining the course and grounds as well as typical rates of application of these products. Provide information regarding the proposed subsurface drainage systems for the course specifically including information regarding onsite retention and storage of drainage (stormwater, irrigation, etc.) water from the course.

Please identify and discuss the location of any outfall structures associated with any subsurface under drain system that might be included as part of the golf course. Specifically, if there are any outfall structures from a subsurface drainage system, their location and construction should be built to allow for nonerosive discharges that could result in sediment deposition in streams.

- 3. Provide information concerning the geological and hydrogeological factors affecting the movement of groundwater at the site. This information can be collected through the installation of test borings and monitor wells and should include the following:
 - a. depth to the groundwater (specifically the seasonal high water table),
 - b. thickness of overburden or saprolite,
 - c. depth to bedrock.
 - d. orientation and dip of predominate fractures, joints and bedding planes, and
 - e. the rate or velocity of groundwater movement (vertically and horizontally).
- 4. Depth of bedrock below finished grade of all fairways and greens.

Please note that some of the information specified in No. 3 above may have been collected as part of the hydrogeological evaluation required as part of the Nondischarge permit application. While this information may be used, sufficient additional information must be collected from across the site to be representative of site conditions.

Please direct any questions you may have on groundwater issues to Jay Zimmerman at 919-791-4200, or to jay.zimmerman@ncmail.net.

Please respond in writing within 30 calendar days of the date of this letter by sending five copies of your response to the Hearing Officer Jay Zimmerman, care of Cyndi Karoly, 2321 Crabtree Blvd., Suite 250, Raleigh, NC, 27604. If you will not be able to provide the requested information within that timeframe, please provide written confirmation that you intend to provide the requested information, and include a specific timetable delineating when the requested materials will be provided. If we do not hear from you in 30 calendar days, we will assume that you no longer want to pursue this project and we will consider the project as returned.

This letter only addresses the application review and does not authorize any impacts to wetlands, waters or protected buffers. Please be aware that any impacts requested within your application are not authorized (at this time) by the DWQ. Please call Ms. Cyndi Karoly at 919-733-9721 if you have any questions regarding or would like to set up a meeting to discuss this matter.

Cyndi Kawly

Roger Edwards, DWQ Asheville Regional Office cc: Jay Zimmerman, DWQ Raleigh Regional Office

John Hennessy, DWQ, NPSACOU, Supervisor

Amanda Jones, USACE Ashville Regulatory Field Office

Gray Hauser, Division of Land Resources

Jennifer Robertson, WNR, PO Box 882, Canton, NC, 28716

Shannon Deaton, NC Wildlife Resources Commission

David Gantt, Buncombe County Commissioner, 82 Church St., Asheville, NC, 28801

Nathan Ramsey, Chairman, Buncombe County Commissioners,

60 Court Plaza, Asheville, NC, 28801

Austin Gerken, Southern Environmental Law Center,

29 N. Market St., Suite 604, Asheville, NC, 28801

File Copy

Interested Parties from Public Hearing

Filename: 20080880Cliffs(Buncombe)HOLD