

### **Roll Call**

Dennis Kuhn called the January 16, 2012 BOSAC meeting to order at 5:30 pm. Other BOSAC members present included Scott Yule, Devon O'Neil, Jeff Carlson, Mike Dudick, and Jeff Cospolich. Staff members present were Peter Grosshuesch, Mark Truckey, Chris Kulick, Tony Overlock and Scott Reid. Turk Montepare, Brian Lorch (Summit County), Mark Beardsley (EcoMetrics), Dr. Christy Carello (Carello Consulting), Jeff Zimmerman and Randy May (Breckenridge Ski Area), were also in attendance. Prior to the start of the meeting, staff and BOSAC held a site visit to properties being considered for acquisition under Executive Session.

### **Approval of Minutes**

The minutes were approved as presented.

### **Approval of Agenda**

The agenda was approved as presented.

### **Public Comments**

There were no public comments

### **Staff Summary**

#### **2012 Workplan**

#### **2012 VOC Project dates**

#### **Joint OSAC/BOSAC meeting 2/1/12**

#### **Bicycle Friendly Community**

### **Open Space and Trails**

#### **Cucumber Gulch Preserve conservation monitoring program**

Scott Reid outlined the history of the monitoring program dating back to 2001. This year, we changed water monitoring consultants from ERO to Ecometrics and had a record precipitation year. Staff presented findings from the Ecometrics report and preliminary findings from Dr. Carello.

#### **A. Major points from Ecometrics' report:**

- 1) Overall, Cucumber Gulch Preserve continues to contain a valuable and productive wetland complex with high functioning water quality and biodiversity values. The Preserve's interior wetlands are the most functional and intact.
- 2) Wetlands in Upper Cucumber Gulch below the Peak 8 base area appear to be shrinking in size. This wetland area loss may be related to the drying of beaver ponds and the concentration of water flows in Boreas Creek.
- 3) The primary issues facing the wetlands in Upper Cucumber Gulch include:
  - a. Altered sediment budget
  - b. Altered water source and distribution
  - c. Loss of beaver
- 4) Existing threats and stressors on the edge of the Preserve will likely impair interior wetlands over time.

- 5) Immediate action should be taken to address the above concerns and prevent further degradation.
- 6) The 2012 monitoring program should be refined to inform management objectives related to these results.

Representatives from the ski resort (Randy May and Jeff Zimmerman) were in attendance. The ski resort has been working with their consultants to review the report. In preliminary meetings, the ski resort has agreed to partner with the Town to help remedy some of the issues in the Gulch.

Mike Dudick: The evidence seemed pretty definitive, how much more monitoring do we have to do?

Scott Reid: We need to understand some specifics to better remedy the existing situation. Research info will help us design better solutions.

Mike Dudick: Any ideas of potential costs?

Scott Reid: We need to understand better what exactly is needed. We will present costs after we work with the ski area on potential solutions.

Mike Dudick: Can a design solution be figured out by the next budget cycle (October 2012) so we can allocate money to remedy the problem?

Mark Beardsley: We have to work through the design phase to figure out budget, but October certainly seems reasonable.

Devon O'Neil: How dire is the situation in the Gulch?

Mark Beardsley: Most of the interior in the Gulch is functioning well, but there are some severe problem areas on the periphery. We need to act soon to preserve the integrity of the entire system.

Peter Grosshuesch: The problem areas could potentially have a cascading effect, damaging the entire system.

Devon O'Neil: Has the ski resort been studying the Gulch and how the resort contributes to its degradation?

Randy May: We have been monitoring wetlands, water quality and quantity prior to construction of the peak 7& 8 projects. This was part of our Army Corps of Engineers permit, as well as part of the development agreement for Peak 8. We are trying to figure out how Ecometrics' new methodology compares with previous methodologies.

Scott Reid: The Town has worked with the ski resort to design proper water quality management associated with their developments.

Mark Beardsley: Much of the damage occurred slowly over time, so it may not have been apparent until a certain level of degradation occurred.

Jeff Cospolich: Can we preserve the wetlands without beavers?

Scott Reid: From an engineering standpoint, there are ways, but they will likely be more expensive and less efficient than beavers. The beavers will likely do it better and be less costly. Many plants and animals rely on the beaver's presence and maintenance of a beaver pond.

Scott Yule: Is it possible to restore Upper Cucumber Gulch or is it too late?

Mark Beardsley: We are not sure if we can restore upper Cucumber Gulch, there are no guarantees with this type of work. However, we believe can prevent the degradation from spreading into the lower wetland complex.

Dennis Kuhn: *Does BOSAC support Town staff continued cooperative work with ski area representatives to outline and implement necessary measures to address the concerns outlined in Ecometrics' report?*

Mike Dudick: Yes, can we get some costs for the remedies quickly? Can we implement some short-term solutions in the meantime?

Mark Beardsley: I suggest figuring out what the ultimate solution is before trying anything. We should have a broader plan before we start implementing measures.

Christy Carello: I advocate for a short-term solution to protect the beaver lodge at the reset pond.

Scott Reid: We are working on a combination of short-term and long-term solutions.

Mark Beardsley: The reset pond collects all the water and sediment and redistributes the water to all the other channels in the lower Cucumber Gulch system.

Devon O'Neil: Yes to the question; are there any discrepancies between the Town's and ski resort's monitoring methodologies that need to be vetted before we can be productive partners?

Randy May: I don't think there are any issues that need to be vetted. There will need to be follow-up meetings to discuss implementation strategies.

Peter Grosshuesch: We are happy with the level of cooperation on this issue from the ski resort.

Randy May: We both want to spend money on a solution rather than continuing to have our consultants go back and forth.

Jeff Zimmerman: We will have to also work with the Army Corps to move forward on this issue. They ultimately will have a heavy influence on how we move forward.

Jeff Cospolich: We should continue to work with the ski resort on this issue.

Scott Yule: Yes, I am in favor with continuing to partner with the ski resort on a solution. I would like to investigate how to control sediment at its source. Preferably, the water and sediment could be slowed down at the inlet to the culvert so that all of the work will be done on the ski area, not in the Preserve.

Jeff Carlson: Yes, I am in favor with continuing to partner with the ski resort on a solution. Many beaver dams were destroyed last summer but most that were in healthy systems were rebuilt quickly. I don't see those dams being rebuilt yet in Cucumber. This is concerning.

Dennis Kuhn: Yes, I am supportive of working with the ski area on solutions. What percentage of Peak 8's drainage ends up in the Gulch?

Jeff Zimmerman: I don't know the overall percentage but it's significant.

Denis Kuhn: How can we slow down the water coming off the ski area, before entering the Preserve?

B. Scott Reid presented Dr. Carello's Initial Findings:

- 1) There are no notable or significant changes in vegetation species richness, diversity, composition or abundance in the Preserve.
- 2) Although limited in the interior of the preserve, noxious weeds appear to be expanding on the periphery, typically following recently disturbed areas such as the gondola alignment and the area below the Peak 8 base.
- 3) Vegetation patterns in Upper Cucumber Gulch have begun to change, consistent with a loss of wetland area.
- 4) Avian research in Upper Cucumber Gulch suggests a reduction of species diversity, abundance, and richness.
- 5) Willow research on groomed and maintained Nordic ski trails show an increase in stem density, with limited or non-existent sexual reproduction (catkins), suggesting that Nordic ski management affects willow reproduction within the groomed ski trails.
- 6) The willow exclosure study indicates that browsing mammals (e.g. moose and beaver) prefer to browse in unaffected areas, when compared to managed ski trail alignments.
- 7) Avian research along summer recreational routes indicates no change in abundance between closed and open trails.
- 8) Trail camera-based research suggests that moose, coyote and fox are all displaced from trail corridors when a trail experiences significant recreational use. Coyotes and foxes tend to accept a 40 person per day threshold along trails without being displaced. The animals are moving away from trail corridors during heavy recreational use but are not leaving the Preserve as a whole.
- 9) The months of May and June continue to be a sensitive time for wildlife in the Preserve. Trail and gondola closures until July 1<sup>st</sup> at the earliest are recommended.

C. Scott Reid presented information on the 2012 Monitoring Program

Based on the findings above, Dr. Carello and Ecometrics have worked with Town staff to draft the 2012 Cucumber Gulch Preserve monitoring plan. In general, the consultants recommended the following:

- 1) Thoroughly evaluate the wetland distribution and condition in Upper Cucumber Gulch.
- 2) Quantify water flows and impacts at Boreas Creek culvert.
- 3) Quantify sediment loads at Boreas Creek culvert.
- 4) Monitor channel instability and erosion rates in Boreas Creek.
- 5) Research beaver health and habitat requirements.
- 6) Establish wetland habitat photo points.
- 7) Evaluate and revise current ambient wildlife monitoring program.

Scott Reid: The Town is committed to a long-term monitoring program to inform and improve Cucumber Gulch Preserve management. However, this program should also be well conceived and financially sustainable. In 2010, BOSAC and staff evaluated and reprioritized the Cucumber Gulch conservation monitoring program, yielding the 2011 water quality evaluation. The 2011 evaluation met its goals by performing a holistic assessment of wetland health in the area, identifying specific issues of concern, and outlining an efficient future monitoring program.

The proposed 2012 monitoring program represents a shift from baseline data gathering toward research of specific known problems. With the consultants' approval, staff recommends:

- 1) Retaining previously prioritized research elements (e.g. site-specific trail or gondola impacts, weed surveys, some water quality elements, wildlife photo points)
- 2) Reducing the frequency of some monitoring elements (e.g. general vegetation research, some wildlife-focused studies, some redundant water quality measures).
- 3) Redirecting research monies towards known problem elements (e.g. weed surveys, channel stability measures, wetland photo plots, beaver health evaluations outlined above)

The goal on this monitoring strategy is to downsize research costs, while targeting specific information that will help staff design and implement solutions to the concerns raised in Ecometrics' and Dr. Carello's reports. Research should effectively inform management of the Preserve, yet decline in cost over time.

Staff requests BOSAC consider the proposed 2012 monitoring goals and answer the following questions:

1. *Does BOSAC support the suggested 2012 monitoring program, devoted specifically to gathering additional information about the concerns outlined in Ecometrics' 2011 report?*
2. *Does BOSAC have any additional questions or recommendations regarding the 2012 Cucumber Gulch Preserve monitoring program?*

BOSAC unanimously supported the proposed direction of the 2012 monitoring program and requested more specific cost information.

Mike Dudick: Who is going to foot the bill for the repairs that Town and ski area staff are discussing. Whose dime is this?

Randy May: We will go in and conduct repairs before 2012 run-off begins. Those should be the ski area's costs and we are planning on it. Beyond the short term solution, we will have to research and design the appropriate solutions. Then, let's talk.

## **Cucumber Gulch Management Plan**

Chris Kulick outlined the management planning process and public review of the plan. In general, public input was supportive of the policy direction articulated by BOSAC and Council. We spread information about this plan in a number of ways to reach as many members of the public and adjacent property owners as possible. Staff now seeks BOSAC approval of the management plan document. If approved by BOSAC, the document would then be brought for Town Council review and approval.

Mr. Cospolich: How many public comments did you receive? Good job reaching out to a wide variety of people to comment on this plan.

Mr. Kulick: We received comments from approximately 25 individuals.

BOSAC unanimously supported approval of the management plan.

### **2011 Trail Crew Year-in-Review**

Tony Overlock presented the 2011 Trail Crew Year-in-Review.

### **February BOSAC meeting date**

The February meeting was rescheduled for Monday, February 27<sup>th</sup> to account for mid-winter break in the school system.

### **Executive Session:**

Mr. Yule made a motion to move into executive session at 7:10 pm to discuss property acquisition. The motion was seconded by Mr. O'Neil.

Mr. Carlson motioned to come out of executive session at 8:03 pm, Mr. Yule seconded the motion.

### **Next Meeting**

The next regularly scheduled meeting is on February 27, 2012 in the Administrative Conference Room at the Breckenridge Town Hall (150 Ski Hill Road). A joint BOSAC/OSAC meeting is scheduled for February 1, 2012 in the Commissioner's meeting room in the Summit County Courthouse.

The meeting was adjourned at 8:15 p.m.

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Dennis Kuhn, Chair