

**Analysis of the Valles Caldera National Preserve's
Entrix Enhanced Revenue Report and Economic Model**

A Review of the Impact of Recent Developments on Cost and Revenue Alternatives

Prepared by: David Menicucci

Prepared for: NM Wildlife Federation

October 10, 2009

Background:

In March 2009, the Valles Caldera Trust issued a report of a comparison of revenue enhancement alternatives for the Valles Caldera National Preserve. The work covered a one-year effort by Entrix Corporation, a marketing company who performed the work under contract to the trust.

The two hundred thirty three page report details an analysis of various business enterprises that might be undertaken by the Trust in order to achieve financial self sufficiency. Two business alternatives were created and analyzed and each was based on a different set of revenue generation enterprises. Listed below are the enterprises assumed for each of those alternatives.

List of revenue generation enterprises for Alternative 1 (taken from the Entrix report, page 148)

Table 28
Percent of Revenue from Annual Operations
for Years 1–10, by Enterprise
(Enterprise, Percent of Total Revenue Generated)

Green Burial, 16
Visitor Center, 15
Other Programs, 12
Mid-Level Lodge, 10
Hunting, 8
Fundraising, 7
Wildlife Tent Camps, 6
Existing Cabin Rental, 5
Education and Research Center, 5
High-End Lodge, 5
Interest Income, 4
Campground, 3
Fishing, 2
Cattle Grazing, 1
Total, 100%

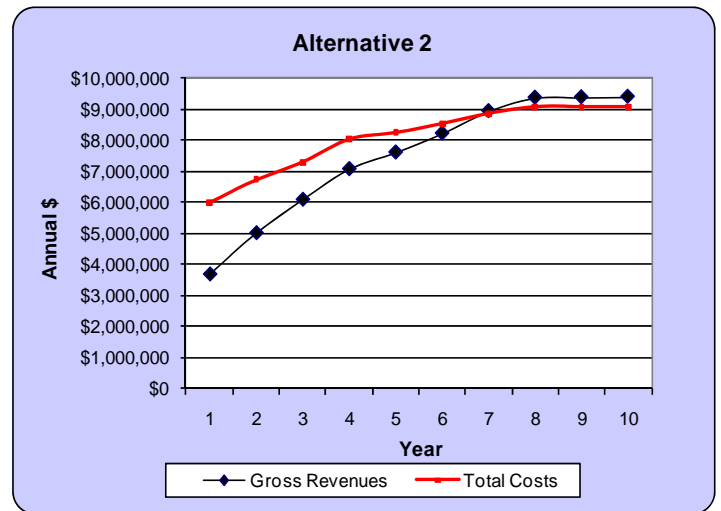
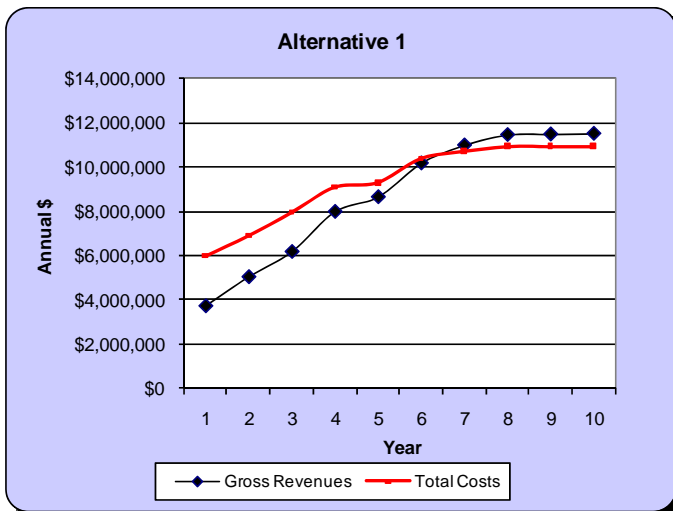
List of revenue generation enterprises for Alternative 2 (taken from the Entrix report, page 153)

Table 31
Percent of Revenues from Annual Operations
for Years 1–10, by Enterprise
(Enterprise, Percent of Total Revenue Generated)

Green Burial, 20
Visitor Center, 19
Other Programs, 15
Hunting, 10
Wildlife Tent Camps, 9

Fundraising, 8
 Existing Cabin Rental, 6
 Education and Research Center, 6
 Campground, 3
 Fishing, 2
 Interest Income, 1
 Cattle Grazing, 1
Total, 100%

Additionally, Entrix created an Excel spreadsheet containing a pro forma model that plots the course of the self sufficiency endeavor by year, assuming that the enterprises they identified could be implemented. The two plots below, taken from the Entrix report on pages ES-3 and ES-4, respectively, show that under both alternatives the VCNP would become self-sufficient in last few years of these temporal scenarios.



The spreadsheet model contains 30 worksheets, all of which are interconnected with one another. A master sheet, which Entrix named the “Control Panel,” is provided to allow a user to change some of the assumptions and to subsequently view the changes in the projections.

Assumptions Modified

Shortly after the Entrix report was issued the local Indian tribes objected to one of the enterprises, Green Burial¹, citing religious concerns. The Trust then withdrew this enterprise from consideration.

Shortly before the Entrix report was issued the NM Legislature voted against a proposal to allow a portion of the Preserve’s elk tags to be auctioned to the public for high prices. The Entrix

¹ Green burial is a term to describe the burial directly in the ground of un-embalmed human corpses. It is a growing practice in some communities.

report assumed that the additional revenue from these high-priced elk tags would be included in the list of revenue generation enterprises².

As can be seen in the list of revenue enterprises listed above, both elk hunting and green burial are assumed to provide considerable income. In fact, in both alternatives green burial is identified as being the highest revenue producing revenue source.

The question has been raised in the public as to what impact the loss of these two revenue sources might have on the projection for self sufficiency.

I was asked by the NM Wildlife Federation to analyze the situation and to exercise the model to obtain an answer to this question.³ I agreed to conduct this analysis and report on the results.

Analysis

I began the analysis by reading the Entrix report in detail. The report is thorough and complete. I obtained a copy of the Entrix economic model from Terry McDermott of the Valles Caldera National Preserve. I loaded the spreadsheet model on the computer and began to exercise its options. Initially I was unable to open all of the worksheets because they were password protected. Again, Terry very cooperatively provided the password. A copy of the original Entrix workbook model is included as an addendum to this report. In this file I have un-protected the workbook and displayed all of the worksheets, but none of the entries in any of the worksheets have been altered. (See associated file: *Valles Caldera Financial Model unhid.xls*)

Once I had a reasonable understanding of the model, I then identified those worksheets that would allow the potential revenue from green burial and high-end elk tags enterprises to be zeroed. These changes can be made in the Control Panel worksheet, but these changes are then reflected in other worksheets and the results are subsequently displayed on the graphs.

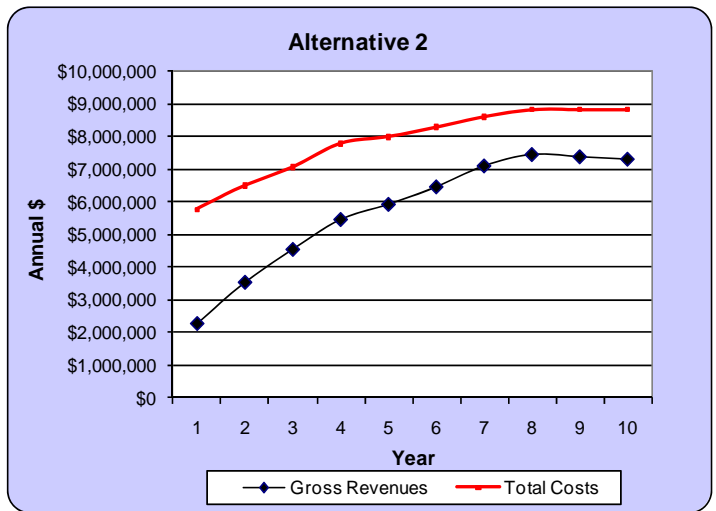
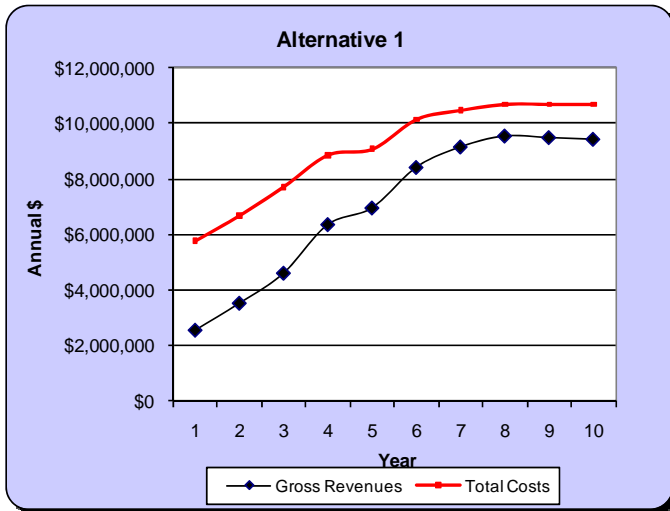
After making the changes in the Control Panel I checked in the related worksheets to insure that the associated worksheets were also changed, as would be expected in an automated system like this one. I especially wanted to insure that not only the revenues for these two enterprises were zeroed, but that the costs associated with them were also zeroed. All the changes were properly implemented.

I have included as an addendum to this report a copy of the Entrix workbook that I modified. (See associated file: *VCNP model test version unhid.xls*) All of the changes I made to the workbook are in the worksheet Control Panel, and the changed cells are colored yellow. Changes from the Control Panel worksheet are reflected in the worksheet named Cost Assumptions.

² The loss of the high-priced elk tags would not prevent the Valles Caldera from selling those tags under the traditional lottery process that has been in use for the past seven years. It would only mean that those tags would create no enhanced revenue, as assumed in the Entrix report.

³ My background as a research engineer with 35 years of experience, including 28 years at Sandia National Labs, qualified me to do this work.

The results of these changes are reflected in the graphs below. As can be clearly seen, the loss of



the green burial and auctioned elk tag revenue generation enterprises has significant impact on the projection and it shows that even assuming that all of the other assumptions can be met, the Valles Caldera will not become self sufficient using either alternative.

If the gross revenue curves are examined carefully, it is clear that the revenue stream actually begins to diminish at about the eight-year mark. The exact cause for this is not readily apparent and I did not have the time to investigate it in depth. However, it is an item of curiosity, especially since this phenomenon does not appear in the original Entrix graphs. It is possible that there is some fundamental flaw in the model itself or some costs were not properly removed when I zeroed out when the revenues for the green burial and elk tags were negated. However, it appears to be a relatively minor effect on the overall trend and does not alter the fundamental conclusion.

Conclusion

The loss of the green burial and high-priced elk tags as revenue sources has a significant impact on the prospect of self sufficiency for the Valles Caldera National Preserve. The Entrix model shows that even if the preserve were to be commercialized to the fullest extent, the loss of these two generation sources would apparently prevent it from ever becoming financially self sufficient.