# ESTIMATING WILLINGNESS TO PAY FOR TREE PLANTING TO IMPROVE ENVIRONMENTAL QUALITY AT BEKHAL, KURDISTAN AN REGION OF IRAQ

**Haji Yazdeen Haji and Abdulah Saeed Aldabash\***

Forestry department, College of Agriculture, University of Duhok, Iraq.

## Abstract

The objective of this study is to investigate tourist charging as an additional budget to prop up the environmental quality through tree planting at Bekhal tourist destination in Kurdistan region of Iraq. Non- market evaluation techniques namely contingent valuation method is used to estimate the amount of tourist willingness to pay to improve environmental quality at Bekhal tourist destination. A survey of (260) Questionnaires by face to face interview was used to elicit the tourist desire to pay the offered amount as the entrance fee to Bekhal tourist destination. The Double-bonded dichotomous choice contingent valuation method has been used to exploring tourist desire to pay the offered amount as the entrance fee. Linear multiple regression analysis was applied to determine the tourist desire to pay model. Using contingent valuation method the average value of visitor willingness to pay is (US$1.92) and the total annual willingness to pay value for Bekhal tourist destination for sample study (260) visitors is (US$29933) and annual total willingness to pay for improvement environmental quality through trees planting is (US$15744311). The most striking result to emerge from data is that the tourist desire to pay inter fees to improve environmental quality in Bekhal tourist destination was not based on the per capita income, but rather on the visitors environmental awareness and them knowledge of the importance of the environmental and its preservation of the deterioration. Therefore the results showed insignificant effect on income. While, visitors educational level has a significant effect on the visitors desire to pay the enter fee to improve the environment and protect it from the deterioration. The results of this study could be used by researchers and policy analysts 'at the ministry of environmental and tourism authority to justify the implementation of improvement and conservation of the tourist destination.

*Key words: Contingent Valuation, Bekhal,* tree planting *; Willingness.*

## Introduction

The environmental quality of the natural tourist destination is depend on number of trees in the location. Therefore, it is negatively affected by climate change and tourist overuse, especially considering the abundant potential of the natural locations compared to what is currently supplied for public use. Nature based tourism can play an essential role in improvement, maintenance and sustainability of natural environments (Brandi L., *et al.,* 2014). Depending on UNESCO,2012, http:// www.unesco.org/education/tlsf/, tourism dependent on nature areas accounts as one of the most rapidly growing economic sectors. Despite the importance of nature, tourism destinations and health of protected areas, Bhandari, A.K., *et al.,* (2010), states that managers in

developing countries are failing to discover or sufficiently increase revenue income to sustain and upgrade environmental attractions. A visitors' entrance fee has been charged in many national parks and nature destinations in the world (Mansourian, S., Dudley, N., 2008). According to McDowel, L., *et al.,* (2014) nature tourist destinations' entrance fee fills the void where funding sources of tourist destination and protected area are so incomplete that they fail to achieve their goal. To prevent shortage of funding of the nature tourism destinations, managers and administrators must often seek other sources of support not from government budget. These can be contributions from nature area visitors' contributions and larger donors than just mangers conceptions suitable (http://www.fao.org/docrep/011/ i0627e/I0627E10.htm). In the context of the

*\*Author for correspondence:* E-mail : askeefhaji@yahoo.com

interrelationship between the research problem, its importance and its objectives, the following hypotheses can be formulated: Tourists have a willingness to pay to improve While the level of most well know substitute income sources of protected area and natural tourist destination area (McDowel, L., *et al.,* 2014), Baral, N., Dhungana, A., (2014), stated that donors rarely give continuously and income from them cannot be ensured long term. Consequently, Thur, S.M., (2010) stated that paying an entrance fee is presently the best continuous self-financing of nature tourism destinations and a supplemental benefit is this money can be appropriated to enhance environmental quality, and management, maintenance, and monitoring activities. As noted by the Reynisdottir, M. *et al.,* (2008), a well adjusted entry fee can remarkably help to secure tourism destinations and protected areas. The amount of entry fee must be certificate-based and match visitors' "willingness to pay" (WTP). By conducting so, the offered amount of entrance fees must also take into consideration the visitors' point of view, services provided and environmental quality in tourist destinations.

To those visitors unfamiliar with paying entrance fees, the proposal to pay entrance fees may appear to rebut the definition of "public goods". However, there are factors that should make a fee understood as logical; congestion problems which result from large of tourists and visitors that vandalize and otherwise harmfully impact environment and deteriorate natural attractions cause increase conservation costs. Charging entrance fee would work to cut down on and control traffic congestion, and

fee being charged might also dishearten vandals and those who value the attraction of natural beauty less (Shahabuddin, Gh., 2009). The aim of this research is to specifically explore visitors' wishes to improve environmental quality at Bekhal tourist destination in the Erbil governorate, Kurdistan Region, Iraq.

## Materials and methods

### Study area

Bekhal is the name of a village belonging to the Rawanduz district in Erbil province, Kurdistan Region of Iraq. It is located northeast of Erbil (36°36'48" N and 44°29'45" E), about 107 km east of the Gali Ali Beg resort, about 10 Km. west of Rawanduz district. Near the study area, at the foot of the mountain, a great spring flows like a raging waterfall and due to the abundance of water flowing from the spring and it's height, the water breaks hard onto rocks and then descends through a large area of rocks and forms a number of smaller waterfalls before reaching the bottom. The temperature does not exceed 32°C in summer. It this nature tourism destination has an area of 4250m². The number of tourists that are visiting Bekhal resort approximately are 800,000/year (Watson, C.L., 2013). Bekhal waterfalls can be reached via two ways: one starting from a different waterfall at Gali Ali Beg, and the other is passing through Soran district to the east, crossing Rawanduz, and finally descending toward Bekhal.

### Contingent Valuation Method (CVM)

Contingent valuation method has been applied in to



**Fig. 1.** Map of Iraq show geographic location of Bekhal Tourist Destination.

appraise environmental goods and services. According to Plant strategy of tourism Kurdistan region of Iraq, 2013, the contingent valuation method has been used by economists because of its relative simplicity. It is dependent on the tourists' desire to pay to protect or reinstate and improve environmental "goods". In other words, this is to imitate a hypothetic market in which the individual can in a straight line expose his preferences and desire to pay in return for goods or services provided by the nature environment (Cumming RG, *et al.,* 1986). The CVM is at present the most frequently applied method in the valuation of environmental assets. In this study a face to face interview will be conducted, then I will estimate Total amount of visitors willingness to pay to improve environmental quality by calculating the average WTP of respondents and multiplying this by the total number of tourists, multiplying by the average number of visits.

**1) Questionnaire design:** The DBDC-CVM opinion poll includes three parts. The first part was designed to collect data about visitor's socio-economic characteristics. The second part includes questions to obtain data about the tourists' opinion and contentment on Bekhal tourism characteristics. The last part of the questionnaire represents the hypothetical market; the visitors are asked a simple question on their maximum willingness to pay for a good or services. For example: "Presume the Kurdistan tourism authority charged a fee to enter the tourism site. Would you mind to pay $X as an entrance fee to the tourist destination?" If the answer is "yes", the respondents are asked if they would pay a higher price. But, if the answer is "no", the respondent is asked about a lower price.

**2) Sampling and data collection:** The survey questionnaire interviews are conducted face to face because it supplies a help to respondents, facilitates high response rates, and it is more appropriate for complex questions. Both formulation single and double bound dichotomies choice-contingent valuation method have been the most common techniques among researchers who use contingent valuation method, they also mentioned that the double bounded is prefer above the single bound formulation (Hanley N., Spash C. 1993). Consequently, the double bound dichotomous choice, willingness to pay method was applied in this study to elicit visitors' willingness to pay for improved environmental quality of the Bekhal resort. Dependent on Calia, P., *et al.,* (2000) the appropriate sample size for analysis must be between 200 to 250 individuals. Randomized sampling method was applied, and the number of questionnaires determined depend on the average of visitors for ten years to Bekhal

resort by using (Cochran, W.G., 1977) formula; the sample size of 260 respondents were determined for this study. Tour guides and those who work in the sector were excluded from the survey. Before surveying, the objective of the study was explained to the respondents for preventing biased information. Data was collected between 5 Jun, 2017 and 10 September, 2017, and the obtained data was analyzed statistically by SPSS.

**Data analysis**

The multiple regression analysis was used to estimate and clarify relationships between variables (dependent and independent). The major purpose of study is to give the researchers more opportunity to learn the relationship between the studied variables.

From the Table 5 it appeared the model specification indicates involved variables of the study are dependent variables (WTP) in US$ for improving environment quality in the Bekhal nature tourism destination. The table 5 shows there are five predictor variables; various types, including descriptive and quantitative were studied. These variables were taken for several reasons. First, some authors have used them in their studies. Second, they have been cited and discussed in the earlier literature. Studied variables referred to in the previous studies are concerning willingness to pay, and these selection variables express the willingness to pay of respondents.

WTP = f (Income, Age, Level of education, satisfaction, number of visits).

Or,

$$WTP = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + e_i$$

Where:

$\beta_1, \beta_2, ...... \beta_5$ are the model coefficients for the independent variables $x_1, .. , x5$

$e_i$ is the random error of the model.

X1 = Monthly income, X2 = Age, X3 = level of education, X4 = Tourists satisfaction from basic amenities and service provided, X5 = Number of visit during the season.

## Results and Discussion

**Visitors' socio-economic characteristics**

Table 1 shows the results of questions about socio-economic characteristics of visitors. These show that 81% of respondents were male and the remaining were female. Regarding the age of visitors, approximately 44.6% ranged between (18-30) years. 13.1% of respondents were from the Kurdistan region and 86.9% were from other Iraqi governorates. From an educational

**Table 1:** Socieoeconimic profile of respondents.

| Variable | | Fl | % | Mean | S.D |
|---|---|---|---|---|---|
| Gender | female | 49 | 19 | 1.81 | 0.39 |
| | male | 211 | 81 | | |
| Age | 18-30 | 119 | 45.8 | 3.91 | 1.21 |
| | 31-40 | 57 | 21.9 | | |
| | 41-50 | 49 | 19 | | |
| | 51-60 | 27 | 10 | | |
| | >60 | 12 | 4.6 | | |
| Marital status | Widow | 0 | 0 | 2.77 | 0.42 |
| | Single | 60 | 23 | | |
| | married | 200 | 77 | | |
| Level of education | Reading &writing | 5 | 1.9 | 4.62 | 1.42 |
| | Primary | 19 | 7.3 | | |
| | Intermediate | 32 | 12 | | |
| | secondary | 63 | 24 | | |
| | Diploma | 43 | 17 | | |
| | Bachelor | 92 | 35 | | |
| | High study | 6 | 2.3 | | |
| Job or career | House Breeding | 9 | 3.5 | 4.26 | 1.45 |
| | Student | 23 | 8.8 | | |
| | Employed | 35 | 14 | | |
| | Government employee | 105 | 40 | | |
| | freelance | 88 | 34 | | |
| Income | Less than 200000 | 2 | 0.8 | 4.82 | 2.04 |
| | 2001000-400000 | 26 | 10 | | |
| | 4001000-600000 | 54 | 21 | | |
| | 6001000-800000 | 40 | 15 | | |
| | 801000-1000000 | 60 | 23 | | |
| | 1001000-1200000 | 23 | 8.8 | | |
| | 1201000-1400000 | 21 | 8.1 | | |
| | 1401000-1600000 | 13 | 5 | | |
| | >1600000 | 21 | 8.1 | | |
| Type of trip | Alone | 4 | 1.5 | 2.4 | 0.52 |
| | With family | 148 | 57 | | |
| | With group | 108 | 42 | | |
| Number of family Member | 0 | 25 | 9.6 | 4.2 | 2.46 |
| | 2 | 30 | 12 | | |
| | 3 | 36 | 14 | | |
| | 4 | 65 | 25 | | |
| | 5 | 47 | 18 | | |
| | 6 | 26 | 10 | | |
| | 7 | 13 | 5 | | |
| | 8 | 7 | 2.7 | | |
| | 9 | 3 | 1.2 | | |
| | 10 | 1 | 0.4 | | |
| | 11 | 1 | 0.4 | | |
| | 12 | 4 | 1.5 | | |
| | 14 | 2 | 0.8 | | |
| Where do you orig- | Kurdistan Region | 34 | 13.1 | 7.86 | 3.707 |

| Variable | | Fl | % | Mean | S.D |
|---|---|---|---|---|---|
| inally come from? | Others Iraqi Governorates | 66 | 86.9 | | |

standpoint, most respondents (51.9%) had a university degree. Among the respondents a percentage of 76.9% were married, and 23.1% single. From the standpoint of respondents' income, the mean domestic visitor's monthly income was estimated to be equal to 734.7 USD.

**Respondents' Visit Frequency to the Bekhal Resort**

According to the questionnaires system I collected data about number of visits to Bekhal, results about visitors' frequency are reported in 66 table 2, most respondents (64.2%) said that the current visit was their first visit to Bekhal; 35.8% of respondents had visited the resort before. 14.2% of visitors said that it was their second time, whereas 14.6, 5.8% and 3.1% visiting three or four time or more, respectively.

**Table 2:** Visits frequency to the tourist destination.

| Variable | | frequency | | Mean | S.D |
|---|---|---|---|---|---|
| | | No. | % | | |
| Is this first time you have been to this tourism site | yes | 167 | 64.2 | 1.64 | 0.5 |
| | No | 93 | 35.8 | | |
| How many times have you visited this tourism site during this season | First time | 162 | 62.3 | 0.73 | 1.1 |
| | One visit | 37 | 14.2 | | |
| | Tow visit | 38 | 14.6 | | |
| | Three visit | 15 | 5.8 | | |
| | 4 visit and more | 8 | 3.1 | | |
| Will you come to the tourism again | No | 103 | 39.6 | 1.94 | 0.9 |
| | May be yes | 70 | 26.9 | | |
| | Yes | 87 | 33.5 | | |
| How many time in the past year have you visited this tourism destination | Zero | 152 | 58.5 | 0.74 | 1.2 |
| | First visit | 71 | 27.3 | | |
| | second visits | 12 | 4.6 | | |
| | Third visits | 9 | 3.5 | | |
| | Fourth visits | 9 | 3.5 | | |
| | Fifth visits | 7 | 2.7 | | |

**Visitors' Satisfaction with the goods and services supplied at the Bekhal resort.**

Visitors' satisfaction was specified depending on five-point Lekert scales that ranged between "not satisfied" to "very satisfied". Table 5, represents tourist evaluation of goods and services that are currently provided at Bekhal resort nature area.

**Contingent valuation method results**

The analysis of double bonded-dichotomous choice contingent valuation method respondents' offered

**Table 4:** Distribution if "YES" respondents.

| Bid value(US$) | Yes-Yes-Yes | | Yes-Yes-No | | Yes -No-Yes | | Yes -No-No | | No-No-No | |
|---|---|---|---|---|---|---|---|---|---|---|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| ID Zero | - | - | - | - | - | - | - | - | 21 | 8.1 |
| >1.63 | - | - | - | - | - | - | 108 | 41.5 | - | - |
| = 1.63 | - | - | - | - | 20 | 7.7 | - | - | - | - |
| = 2.45 | - | - | 78 | 30 | - | - | - | - | - | - |
| >2.45 | 33 | 12.7 | | | | | | | | |

One US $= ID122.5

**Table 3:** Degree of tourist satisfaction with bekhal resort.

| Bek hal Res ort | V.US FI | | US FI | | Nuterian FI | | SA FI | | V.SA FI | | Mean | SD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No | % | No. | % | No. | % | No. | % | No. | % | | |
| | 2 | 1 | 35 | 14 | 185 | 71 | 32 | 12 | 6 | 2 | 3.02 | 0.6 |

amounts. We classified semi-randomized variables and used symbol (2) to indicate "yes" and symbol (1) to indicate "no". Replication of willingness to pay for each offered amount in hypothetical market was shown in table 4. Visitors were asked about their willingness to pay; just 8.1 % refused, whereas 91.1% agreed to pay. Of those respondents rejected to pay the first offer amounts I asked them what their opinion was about paying a suggested lower amount, and 84.37% refused the second offer, whereas 15.63 % accepted the second offer. Respondents who accepted to pay the first offered amount were offered higher amounts, which 70.27% rejected and 29.73% accepted. These results agree with the results of previous studies; as the designed questions worked to restrict respondents' reasons for responding (NO-NO-NO). Of those with zero willingness to pay, this was due to different reasons. Some of respondents said that "Government should pay", and of some unwilling respondents who came in their private cars, they said they had paid an entry fee to the Kurdistan region at the first check point leaving other Iraqi governorates, and they did not want to have to pay again. Others simply responded, "I do not want to pay the entrance fee."

**Multiple Linear Regression Model**

Table 5 showed a mutable linear regression model. Tourist willingness to pay is affected by socio-economic characteristics such as age, education level, household income, and visit frequency during the season, visitor satisfaction with "goods and services" provided at Bekhal tourist destination, were used as dependent variables. From the analysis results we found that satisfaction and education level have significant effect on tourists' willingness to pay. We also investigated the a relationship between the tourists' desire to pay an entrance fee and their income. Tourists' opinion and thought about the value

of "goods and services" provided at Bekhal and higher level of education are positive, and negative in association with higher age, and the higher number of visits.

$$WTP = 2635.5 + 0.041 * Inc. - 0.012 * Age + 0.114 * L.E + 0.594 * SAT - 0.077 * Vn. \quad (1)$$

**Table 5:** Results of multiple regressions.

| Variables | Coefficients | t-value | Sig. |
|---|---|---|---|
| Constants | -2635.5 | -3.413 | 0.001 |
| Income | 0.041 | 0.729 | 0.466 |
| Education level | 0.14 | 0.114 | 0.026* |
| Age | -0.012 | -.234 | 0.815 |
| Satisfaction | 0.594 | 0.594 | 0.000*** |
| Number of visits | -0.077 | -1.531 | 0.127 |
| Mean willingness to pay | US$1.92 | | |
| R-Square | 0.38 | | |
| Adj .R Squar. | 0.37 | | |
| Sig. | 0.000 | | |

Concerning the analysis results shown in table 5. The suitable model for analyzing our data was determined by the Adjusted $R^2$ value of 0.37 with significant 0.000, this indicates that a 38% willingness amount is dependent on the independent variables that determined in model regression and the correlating coefficient is unequal to zero. Thus, we reject Null hypothesis and accept the Alternative hypothesis. The results of the variance analysis showed that the correlating relationship was significant by the value of Sig. = 0.000. Also it was shown from the coefficient table that the satisfaction and education level have a significant effect on regression equation, while other variables of age, income , as well as number of visits to the tourist site during the season have no effect on the regression equation. From the author s point of view the value of the weak correlation coefficient between dependent and independent variable is the result of two factors; first because of the large size of the study sample and on human behavior in data collection , second, tourist destinations in the Kurdistan region are the only outlet for the rest of the Iraqi provinces peoples (there are no substitutes tourists destinations),

and that (therefore) visitors have desire to pay entrance fees for improving environment quality at tourist destinations despite of the amount of income, wherefore income is not a significant factor on the tourists' willingness to pay, whereas 98.85% of respondents are from Iraq provinces.

**Willingness to pay estimates.**

The average amounts of tourists' willingness to pay from this study was (US$ 1.92) per visit per person and the average number of annual visits is (1.7). Aggregate results were obtained by equation (2). The findings show that the annual total willingness to pay value for improving environmental quality for Bekhal resort for study sample would have been about (USD29933); and depend on annual total number of visitors to Bekhla tourist destination (473, 394), the total willingness to pay for improve environmental quality through trees planting at Bekhal tourist destination would have been about (USD 1, 574, 311) in 2017.

T.A. WTP for tourist site = Average individuals willingness to pay* average annual visits/*Numbers of annual visitors.................(2)

The estimated WTP amount is the first study of its type conducted in the Iraq and Kurdistan region. Because of this, there are no previous studies to estimate amount of willingness to pay. Therefore the result of this study were compared with results of studies of this type in other countries (developing and developed countries ) and I investigated that the estimated willingness to pay in our study is less than that of other studies. Our independent variable agrees with previous studies (e.g., Peters, H., *et al.,* 2009, Thur, S.M., 2010 , McDowel, L., *et al.*, 2014 ) state that, tourists' desire increased with level of education increasing (positive relationship between tourists' education level and tourists desire to pay). In our study, visitors' age, numbers of visit and income have not significant correlation with willingness to pay, and the relationship with age and total numbers of visit during the season were negative. This implies that senior age respondents were not ready to pay more and therefore have less desire to pay the government in return for improving the environmental quality in Bekhal nature tourist destination. Tourists who have visited the Bekhal destination multiple times have willingness to pay less because they do not understand the challenge of the tourist site management on the growing demand to provide the expectations of visitors at the Bekhal resort, and the important need of the management to have income to sustain a good quality of the nature destination. Tourists' satisfaction with goods and services providing at Bekhal resort has significant affect on tourist's willingness to pay with positive relationship and this shows that as their satisfaction increased, their willingness to pay increased.

## Conclusions

Market does not provide prices for environmental goods and services (Use and Non-use goods and services), economics provide techniques and methods for valuing environmental use and non use services. Contingent valuation method has been used in this research to provide an educated guess concerning tourists' desire to pay. The study found that tourists satisfaction with services and facilities provided at Bekhal and education have a direct and significant relationship with tourists' willingness to pay. On the other hand, age and income were found not to be significant in influencing visitor's willingness to pay with negative and positive relationship respectively. The average tourists' willingness to pay was found to be USD 1.92, and the annual willingness to pay value for the tourist site was estimated to be (USD 1574311). The results revealed by this study can be used by planners, future researchers, investors, and managers in management of nature tourism sites and other related areas.

## References

Baral, N. and A. Dhungana (2014). Diversifying finance mechanisms for protected areas capitalizing on untapped revenues. *For. Policy. Econ.*, **41:** 60–67.

Bhandari, A.K. and A. Heshmati (2010). Willingness to pay for biodiversity conservation. *J. Travel Tour. Mark.*, **27(6):** 612–623. K. Elissa, "Title of paper if known," unpublished.

Brandi, L., P. Marques and A. Neckel (2014). Estimating the willingness to pay for improvement of an urban park in southern Brazil using the contingent valuation method. P(2).

Calia, P. and E. Strazzera (2000). Bias and efficiency of single versus double bound models for contingent valuation studies: a Monte Carlo analysis. *Appl. Econ.*, **32(10):** 1329–1336.

Cochran, W.G. (1977). Sampling Techniques. 3rd Edition. John Wiley & Sons, New York. D. Daud, A. Mohd, Z.M. Hussin, and M. Mariapan (2009). Visitors' wildlife interactive activity.

Cumming, R.G., D.S. Brookshire and W.D. Schultze (1986). Valuing public goods: the contingent valuation method. Totowa (N.J.), Rowman and Allanheld Publishers. pp. 110. ment. Cheltenham, U. Northampton MA.

Hanley, N. and C. Spash (1993): Cost-Benefit Analysis and the Environment. Aldershot, OECD: 314.

http://www.fao.org/docrep/011/i0627e/I0627E10.htm (Accessed on September 2013). http://www.unesco.org/

education/tlsf/ (Accessed on 21 September 2012).

Mansourian, S. and N. Dudley (2008). Public Funds to Protected Areas. WWF International, Gland, Switzerland. Y. Yorozu, M. Hirano, K. Oka and Y. Tagawa, "Electron spectroscopy studies on magneto-optical media and plastic substrate interface," IEEE Transl. *J. Magn. Japan*, vol. 2, pp. 740–741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, 301, 1982].

McDowel, L. and J. Moore (2014). RM 22A : Recreation Fee Collection. National Park Service. US Department of Interior.

Peters, H. and J.P. Hawkins (2009). Access to marine parks : a comparative study in willingness to pay. *Ocean Coast. Manag.*, **52:** 219–228.

Plant strategy of tourism Kurdistan region of Iraq, (2013).

Reynisdottir, M., H. Song and J. Agrusa (2008). Willingness to pay entran fee to natural attractions: an Icelandic case study. *Tour. Manag.*, **29:** 1076–1083. *Marine. Marin Policy*, **34:** 63–69.

Shahabuddin, Gh. (2009). Dynamics between protected areas and economic use Available from: http://www.fao.org/docrep/011/i0627e/I0627E10.htm (Accessed on Septem-ber 2013).

Thur, S.M. (2010). User fees as sustainable financing mechanisms for marine protected areas: an application to the Bonaire National.

UNESCO (United Nations Educational, Scientific and Cultural Organization) (2012). Teach-ing and Learning for a Sustainable Future.

Watson, C.L. (2013). An Economic Analysis of National Park Visitation Rates. Doctoral dis-sertation. MONTANA STATE UNIVERSITY, Bozeman.