

**Forest Service Handbook
National Headquarters - Washington Office
Washington, DC**

**Forest Service Handbook 2609.13 – Wildlife and Fisheries Program Management Handbook
Chapter 70 - Analysis of Economic Efficiency of Wildlife and Fisheries Projects**

Amendment: 2609.13-1992-1

Effective date: August 03, 1992

Duration: This amendment is effective until superseded or removed.

Approved by: F. Dale Robertson, Chief

Date approved:

Responsible Staff:

Last Change:

Superseded Document(s): Entire Handbook, October 1986; Title Page, 00 thru 53.6

Digest: Following is an explanation of the changes throughout the directive by section.

This amendment is a reissuance of FSH 2609.13 to conform the format and structure of the Handbook to the requirements of electronic directive issuance.

70: Establishes new direction for conducting economic efficiency analysis of Wildlife and Fisheries projects.

This Handbook is now available electronically in the National Information Center in the same format as the paper copy. Henceforth, amendments to this Handbook will be issued to Forest Service units electronically on a document basis.

Forest Service Handbook 2609.13 – Wildlife and Fisheries Program Management Handbook
Chapter 70 - Analysis of Economic Efficiency of Wildlife and Fisheries Projects
Amendment: 2609.13-1992-1
Effective date: August 03, 1992

77.27 - Exhibit 02

Example Project for Analyzing and Displaying Economic Analysis

PROJECT NAME - The Can Do Water Development on the Good Times NF, Region 7

PROJECT DESCRIPTION - This water development is principally for deer. It requires 3 acres with a buffer strip and will remove 2 acres from the T.S. Smith range allotment. The project also has a negative impact on the Desert Turkey which will find the area less desirable with water.

Cost Information

Activity Type	Cost year 0	Cost year 10	Cost year 13	Total Cost
Water Improvement	3,500			3,500
Seed & Plant	600			600
Access Management	900			900
Water Management		800		800
Access Management			250	250
Yearly Cost Totals	<u>5,000</u>	<u>800</u>	<u>250</u>	<u>6,050</u>
Discounting Factors	<u>1.00000</u>	<u>.67556</u>	<u>.60057</u>	
Project Present Cost				\$5,690

Habitat Capability (HC) Information

Output Type	HC year 0	HC year 1	HC year 2	HC year 3-18	HC year 19-22
Deer	0	5	8	12	6
Rabbits	10	40	40	40	30
T&E Water Snake	1	2	2	2	2
Song Birds					
Desert Turkey	-2	-2	-2	-2	-2

Forest Service Handbook 2609.13 – Wildlife and Fisheries Program Management Handbook
Chapter 70 - Analysis of Economic Efficiency of Wildlife and Fisheries Projects
Amendment: 2609.13-1992-1
Effective date: August 03, 1992

77.27 - Exhibit 02--Continued

Outputs

Output Type	year 0	year 1	year 2	year 3-18	year 19-22	Total Outputs
Deer Hunt WFUD	0	3	7	11	6	210
Rabbit Hunt WFUD	5	20	20	20	15	425
WL Observation WFUD	5	15	15	15	15	335
Turkey Hunt WFUD	-2	-2	-2	-2	-2	-44
Forage AUM	-6	-6	-6	-6	-6	-138

Dollar Value of Outputs Information

Output Type	Output Price	Value year 0	Value year 1	Value year 2	Value year 3-18	Value year 19-22	Total Value
Deer Hunt WFUD	\$50/wfud	0	150	350	550	300	10,500
Rabbit Hunt WFUD	34/wfud	170	680	680	680	510	14,450
WL Observation WFUD	44/wfud	220	660	660	660	660	14,740
Turkey Hunt WFUD	50/wfud	-100	-100	-100	-100	-100	-2,300
Forage AUM	5/wfud	-30	-30	-30	-30	-30	-690
Yearly Value Totals		260	1,360	1,560	1,760	1,340	36,700
Discounting Factors		1.00000	.96154	.92456	10.77321	1.79182	
Total Discounted Benefits		260	1,308	1,442	18,961	2,401	
Project Present Benefits							\$24,372

Economic Efficiency Calculations

Project Present Benefits \$24,371 minus Project Present Costs \$5,690 equals Net Present Value \$18,681
Project Present Benefits \$24,371 divided by Project Present Costs \$5,690 equals Benefit/Cost Ratio 4.28 : 1