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BASE FEE ADJUSTMENT ALTERNATIVE

By

Darwin Nielsen

Base Fee Adjustment Alternative

Darwin B. Nielsen

First, I do not accept the "appraisal study" new base fees as being based on sound research developed information. Therefore, I have tried to update the 1966 fee data to see where it puts the fee argument in the 1990s. An updated cost of using comparably public and private grazing lands is presented in tables 2 and 3. The original data is shown in table 1.

Table 1. Summary of Combined Average Public Costs and Private Costs per Animal Unit Month - 1966¹

Itemized Costs	Cattle		Sheep	
	Combined		Combined	
	Public Costs \$	Private Costs \$	Public Costs \$	Private Costs \$
1) Lost Animals	0.60	0.37	0.70	0.65
2) Association Fee	0.08	--	0.04	--
3) Veterinary	0.11	0.13	0.11	0.11
4) Moving Livestock, to & from allotments	0.24	0.25	0.42	0.38
5) Herding	0.46	0.19	1.33	1.16
6) Salting & Feeding	0.56	0.83	0.55	0.45
7) Travel, to & from allotments	0.32	0.25	0.49	0.43
8) Water	0.08	0.06	0.15	0.16
9) Fence Maintenance	0.24	0.25	0.09	0.15
10) Horse	0.16	0.10	0.16	0.07
11) Water Maintenance	0.19	0.15	0.11	0.09
12) Development Depreciation	0.11	0.03	0.09	0.02
13) Other Costs	0.13	0.14	0.29	0.22
14) Private Lease Rate	--	1.79	--	1.77
TOTAL COSTS	3.28	4.54	4.53	5.66
Difference	\$1.26 ^b		\$1.13 ^b	
Weighted Average		\$1.23		

^aDeveloped from Data analysis of the grazing fees technical committee--November 29, 1968.

^bThe difference weighted by corresponding AUMs results in weighted average of \$1.23.

Fee and Nonfee Costs of Grazing Federal Lands
(Updated with January 1990 Index Numbers)

<u>Item</u>	<u>1966</u>	<u>1977 (index)</u>	<u>1990 (index)</u>		
Lost animals	\$0.60	\$1.01 (1.68)	(1.80) [♦]	(meat animals/prices received)	= \$1.82
Association fees	0.08	0.16 (2.00)	(1.69)	(production items)	= 0.27
Veterinarian	0.11	0.25 (2.26)	(1.79)	(wage rates)	= 0.45
Moving livestock	0.24	0.55 (2.30)	(2.02)	(autos & trucks) +	
				(wage rates)	= 1.11
Herding	0.46	1.04 (2.26)	(1.79)	(wage rates)	= 1.86
Salting & feeding	0.56	1.18 (2.10)	(1.97)	(auto & truck) +	
				(feed)	= 2.32
Travel	0.32	0.70 (2.18)	(2.13)	(auto & truck) +	
				(fuel & energy)	= 1.49
Water	0.08	0.16 (2.00)	(1.69)	(production items)	= 0.27
Fence maintenance	0.24	0.55 (2.28)	(1.61)	(wages) +	
				(building & fencing)	= 0.89
Horse cost	0.16	0.30 (1.86)	(1.68)	(feed)	= 0.50
Water maintenance	0.19	0.43 (2.28)	(1.61)	(wages) +	
				(building & fencing)	= 0.69
Devel. depreciation	0.11	0.22 (2.00)	(1.69)	(production items)	= 0.37
Other costs	<u>0.13</u>	0.26 (2.00)	(1.69)	(production items)	= <u>0.44</u>
	\$3.28			TOTAL NONFEE COST	= 12.48

1990 FEE COSTS:

Forest Service	=	\$1.81/AUM
BLM	=	\$1.81/AUM

TOTAL 1990 COSTS:	Forest Service -- \$12.48 + \$1.81 = \$14.29
	BLM -- \$12.48 + \$1.81 = \$14.29

[♦]Indices taken from USDA, "Agricultural Prices," Washington, D.C., Economic and Statistics, and Cooperatives Service, January 31, 1990.

Fee and Nonfee Costs of Grazing Private Lands
(Updated with January 1990 Index Numbers)

<u>Item</u>	<u>1966</u>	<u>1977 (index)</u>	<u>1990 (index)</u>		
Lost animals	\$0.37	\$0.62 (1.68)	(1.80) [†]	(meat animals/prices received)	= \$1.12
Association fees	0.00	(2.00)	(1.69)	(production items)	= 0.0
Veterinarian	0.13	0.29 (2.26)	(1.79)	(wage rates)	= 0.53
Moving livestock	0.25	0.58 (2.30)	(2.02)	(autos & trucks) +	
				(wage rates)	= 1.16
Herding	0.19	0.43 (2.26)	(1.79)	(wage rates)	= 0.77
Salting & feeding	0.83	1.74 (2.10)	(1.97)	(auto & truck) +	
				(feed)	= 3.09
Travel	0.25	0.55 (2.18)	(2.13)	(auto & truck) +	
				(fuel & energy)	= 1.19
Water	0.06	0.12 (2.00)	(1.69)	(production items)	= 0.20
Fence maintenance	0.25	0.57 (2.28)	(1.61)	(wages) +	
				(building & fencing)	= 0.92
Horse cost	0.10	0.19 (1.86)	(1.68)	(feed)	= 0.31
Water maintenance	0.15	0.34 (2.28)	(1.61)	(wages) +	
				(building & fencing)	= 0.55
Devel. depreciation	0.03	0.06 (2.00)	(1.69)	(production items)	= 0.10
Other costs	<u>0.14</u>	0.28 (2.00)	(1.69)	(production items)	= <u>0.47</u>
	\$2.75			TOTAL NONFEE COST	= 10.41

1990 FEE COSTS:

Private Fee = \$4.35/AUM (excluding nonfee cost)

TOTAL 1990 COSTS: Private Lease -- \$10.41 + \$4.35 = \$14.76

[†]Indices taken from USDA, "Agricultural Prices," Washington, D.C., Economic and Statistics, and Cooperatives Service, January 31, 1990.

Each cost item was indexed from 1966 to 1990 using USDA information on various cost and income items. The choice which indices to use for each of the first 13 cost items was based on my judgement of which one best fit.

Item 14 "Private Lease Rate" for cattle (\$1.79/AUM) deserves some special attention. This is pure fee since the nonfee expenses are accounted for in the other 13 cost items. In 1966 a private lease rate base was established to be used in computing the forage value index (FVI) annually for the fee formula. This private lease rate base was \$3.65/AUM. Some portion of this \$3.65/AUM lease rate accounts for the nonfee costs in the private market. Since the \$3.65/AUM and the \$1.79/AUM are 1966 estimates of value lets assume the \$1.79/AUM represents the pure fee portion of the \$3.65/AUM. This allows one to estimate the pure fee portion of the 1990 private lease rate used in the forage value index as follows:

\$3.65 Base private lease rate for FVI 11 western states.

\$1.79 Private pure fee from 1966 survey - no fee costs included.

\$1.86 Nonfee portion of \$3.65.

$3.65X = 1.86 \quad X = .509589.$

∴ nonfee cost make up 51% of the \$3.65 private lease rate.

Private lease rate used in computing 1990 FVI = \$8.87.

$8.87/3.65 = 2.43$ FVI for 1990 fees.

$8.87 \times .51 = 4.52$ nonfee cost portion.

$8.87 - 4.52 = 4.35$ pure fee cost in 1990 private lease rate.

After I went through this process, I found you could get the same pure fee by the following procedure:

$$\$1.79 \text{ (pure fee 1966)} \times 2.43 \text{ (1990 FVI)} = \$4.3497 \text{ or } \$4.35/\text{AUM}$$

Given the information developed to this point, we can see how the 1966 model looks in 1990. The 1990 total costs of grazing comparable public and private rangelands are:

Private Total Cost per AUM:

\$10.41 nonfee cost up-dated by indexing 1966 data

\$ 4.35 pure fee cost 1990

\$14.76 Total cost

Public Total Cost per AUM

\$12.48 nonfee cost up-dated by indexing 1966 data

\$ 1.81 1990 grazing fee

\$14.29 Total cost

$$\text{Difference} - \$14.76 - \$14.29 = \$.47/\text{AUM}$$

Private costs exceed public costs by \$.47/AUM. Therefore, based on this analysis the grazing fee formulas under valued public grazing by \$.47/AUM. This could be used as an alternative basis to adjust the \$1.23/AUM base fee. The new base fee would be: $\$1.23/\text{AUM} + \$.47/\text{AUM} = \underline{\$1.70/\text{AUM}}$. This estimate of a new base is essential the same as the \$1.63/AUM in the proposal from your office. I do not know the basis of the \$1.63/AUM so I cannot comment on it.

The indexing problem is more complicated than expected. There is no serious problems of calculating the new index numbers. The problem is deciding which base period

to use for a given base fee. It seems to me if one is adjusting the \$1.23 base fee for some inconsistency then you have to retain the current indexing system with its base as used in PRIA. Index numbers are used to (in theory) keep the "fair market value" \$1.23 fee of 1966 current. Therefore, in 1991 the \$1.97 fee is equivalent to the \$1.23 adjusted for changes in markets as represented by the index numbers. It does not seem appropriate to alter the $\$1.23 + \$0.47 = \$1.70$ and then start a new base period for the indices. The difference between \$1.97 and \$1.23 equals \$.74 would be lost and thus unacceptable. I think the \$1.63 base you have has the same problems. Obermiller says it (\$1.63) results from indexing the \$1.23 up to some period. I assume that period is 1985 by the data presented. This procedure has problems since the \$1.23 has been index annually since 1966 to keep it current so what indexing system do you use that is better than what already exists? Again I think one will have a difficult time justifying a change in the index base to 1985. A 1985 or there about base for the appraisal base fees seems appropriate since the base fee originated at that same time.

Obermiller's proposed all time solution to the fee issue dated September 4, 1991 has several problems in my opinion. I will discuss the items 1 - 11 as listed:

- 1) I have no problems
- 2) Changes in prices of various production inputs should have been accounted for in the indexing system over the 25 years. A more significant factor that has not been taken into account is that the management requirements of the permittees has increased since 1966. It takes more hours of riding now than then. There are more miles of fence to maintain. More miles are driven to

- 11) This probably has some merit but the agencies are not making fee decisions, up front at least, and the legislators who have bills to raise fees do not want facts so what would the task force accomplish?