United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 2890
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20013

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NATIONAL BULLETIN NO. 200-5-1

SUBJECT: ECN - CURRENT NORMALIZED PRICES AND DISCOUNT RATE FOR FISCAL YEAR 1985 WATER RESOURCE PLANS

Purpose. This bulletin transmits: (1) Current normalized prices for agricultural commodities; (2) The price index for computing user-day recreational values; and (3) The discount rate to be used for plan formulation and evaluation in water and related land resources implementation studies in fiscal year 1985. This information is needed by all persons involved in water resources project planning.

Expiration Date. This bulletin expires September 30, 1985.

Background. The Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G) specify the use of current normalized crop prices issued by the Department of Agriculture to evaluate National Economic Development agricultural benefits. The P&G also provide that the conversion of recreational point values to dollar values is to be done with values that are updated each year according to changes in the consumer price index. Another requirement is that the discount rate to be used in water resources planning is updated annually.

Current Normalized Prices:

Enclosed are the current normalized prices for agricultural commodities for fiscal year 1985 as furnished by the Economic Research Service of the Department of Agriculture. The method is unchanged from that used for the calculations last year. The current normalized price to be used for pasture for fiscal year 1985 will not exceed $10.00 per animal-unit-month unless documented by actual data on pasture leases.

Adjustment of Recreation Values:

Recreation user-day values for fiscal year 1985 are to be indexed upward from those shown on page 84 of the P&G by an index factor of 1.05. This is the relationship that exists between the July 1982 and July 1984 Consumer Price Index.

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Project Discount Rate

The Department of Treasury has informed us that the average yield on interest-bearing marketable securities with 15 years or more remaining to maturity in fiscal year 1984 exceeded 8 3/8 percent. The discount rate used in plan formulation and evaluation in fiscal year 1984 was 8 1/8 percent. The discount rate to be used in plan formulation and evaluation for fiscal year 1985 will be 8 3/8.

Roy M Gray

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Director of Economics and
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Enclosure

PURPOSE

The orderly development and use of water and related land resources require that a consistent set of economic standards and criteria be used for the evaluation of agricultural benefits. Agricultural price standards provide the price base for evaluating the agricultural effects of alternative plans for the development and management of water and related land resources.

AUTHORITY

The authority of these standards is set forth in the Water Resources Planning Act (P.L. 89-80) and by the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. These Principles and Guidelines state in part:

> "Section 1.4.10 Prices
>
> (a) The prices of goods and services used for evaluation should reflect the real exchange values expected to prevail over the period of analysis. For this purpose, relative price relationships and the general level of prices for outputs and inputs prevailing during, or immediately preceding, the period of planning generally represent the real price relationships expected over the life of the plan, unless specific considerations indicate real exchange values are expected to change.
>
> (b) The general level of prices for outputs and inputs prevailing during or immediately preceding the period of planning is to be used for the entire period of analysis. In the case of agricultural planning, normalized prices prepared by the Department of Agriculture should be used."

CONCEPTUAL BASIS FOR NORMALIZED AGRICULTURAL PRICES AND COSTS

The project evaluation process should yield valid estimates of the aggregate benefits and costs to those affected during the life of the projects and programs under consideration. A set of relative price relationships representative of the period of analysis over which costs are incurred and benefits accrue is needed. Since price standard forecasting is not presently feasible, the Principles and Guidelines suggest that current price relationships should generally be used. Therefore price relationships observed in a recent time period serve as a proxy for future prices. Current price relationships should not be distorted by short-term abnormalities. Further, the prices should reflect a consistent price level. Agricultural prices and costs are generally influenced by highly variable factors such as weather, insect infestations, sudden demand changes, and inflationary forces. Thus, a procedure, such as the one described in the next section, is needed to correct for the effects of these factors.

COMPUTATIONAL PROCEDURES

The estimates of current (1984) normalized prices shown in the following tables are derived from the commodity prices over the five-year period 1979-83.

The weight coefficients used in these calculations are estimated by a polynomial distributed lag regression technique.1/ A unique set of weights is estimated for each commodity or index from a 34-year time series (1950-83) of season average prices for that commodity or index. The polynomial distributed lag regression determines weight coefficients which place greater emphasis on more recent prices and less emphasis on earlier prices.2/

The season average prices for the time series are deflated by the implicit price deflator for the Gross National Product (GNP) into constant (1967) dollars. Other deflators were deemed unsuitable because they confound inflationary adjustments with short-term changes in prices due to market forces. The weights described in the previous paragraph are used to derive a weighted average of the 1979-83 "real" prices, i.e., a normalized price expressed in 1967 dollars.

The weighted average "real" price is then multiplied by the implicit price deflator for the second quarter of 1984 in order to express the planning price in "current" 1984 values. For several commodities this method of computation yields a normalized price which exceeds the nominal prices for the years 1979-83.

Expressing the current normalized prices in terms of the general price level prevailing in 1984 allows for a comparison among prices of inputs and outputs on a constant price level basis. In past years, current normalized prices were estimated as averages of nominal prices over the previous 5-year period. This procedure resulted in a composite price level for that period. Since evaluation procedures require that current construction costs be used, the agricultural

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1/ The theoretical rationale for applying the polynomial distributed lag procedure is presented in Robert D. Niehaus, "'Normalized'" Prices for Project Evaluation, "Agricultural Economics Research. Vol. 28, No. 2, Economic Research Service, USDA, Washington, D.C., April 1976.

2/ In mathematical terms, the weights were restricted to a second-degree polynomial distribution, increasing monotonically from the weight for the earliest year (1979), where each individual weight is equal to or greater than zero but less than one, and where the sum of the weights equals one.

pri. standards based on a 5-year hi. ory reflected a slightly different price level. The present method minimizes the price level differential.

State prices--The State normalized prices are obtained by multiplying the national normalized prices by the average ratio of the State price to the national commodity price for the period 1981-83. The State normalized prices also are expressed in 1984 dollars.

USE OF CURRENT NORMALIZED PRICES IN PLANNING

Current normalized prices are to be used in all economic evaluations covered by the Principles and Guidelines, such as (1) evaluation of beneficial or adverse effects of alternative projects and programs under consideration; and (2) appraisals of economic impacts where such impacts are expressed in terms of value of production or income.

Special circumstances will require further price estimation, such as: (1) pricing of commodities not included in the price tables; (2) determination of price differentials within States; (3) determination of price differentials to reflect product quality differences from the average represented by published price data; and (4) adjustments to reflect the impacts of project or program actions on market prices. These and other special price problems should be approached in such a manner as to achieve consistency with the published estimation of current normalized prices.

Commodities not covered in price tables--In circumstances where price data for one or more specific commodities are needed, they may be developed by using a three-year average (mean) for each of the desired commodities. Normalized prices derived by this procedure should be based on data for the years 1981-83, to be consistent with normalized commodity prices presented in this guideline.3/

Forest product prices are not included in the tables. Information on current prices for forest products can be obtained from the last issue of The Demand and Price Situation for Forest Products, Forest Service, U.S. Department of Agriculture. The user should be cautioned that to be consistent with the agricultural prices in this report, the stumpage prices should be adjusted to reflect value added from harvesting.

3/ This method also requires that such average prices must be expressed in terms of the price level underlying the present computations, i.e., the second quarter of 1984. To be specific, the 1981-83 average prices would have to be increased by 7.4%, i.e., the change in the implicit price deflator for GNP between 1982 and the second quarter of 1984. In this way the proper relationship between input and output prices will be maintained.

Price di' rentials within States--Curren' ormalized prices for a specific area within a State may be uerived by computing the average local area-to-State price ratio for the 1981-83 period and multiplying by the State normalized price.

Price differential to reflect product quality--Published data do not provide, in most instances, a basis for deriving price estimates for particular quality attributes of a given aggricultural product. Procedures for estimating such price differentials will vary from one set of circumstances to another. Since a standard procedure cannot be specified, analysts confronted by such a problem must develop their own procedures. The basis used for estimating such price differentials should be fully documented in review reports.

Price impacts--As specified in the Principles and Guidelines, whenever implementation of a plan is expected to influence price significantly, the use of a price about midway between those expected with and without implementation may be justified. Special consideration should be given to price adjustments where a program induced shift from a deficit to a surplus production area is expected, or vice versa.

CURRENT NORMALIZED PRICES
FISCAL YEAR 1985

le 1: UNITED STATES: PRICES FOR PRINCIPAL

COMMODITIES AND CURRENT NORMALIZED PRICES

COMMODITY	UNIT	U.S. SEASON AVERAGE PRICES					CURRENT NORMALIZED PRICES
		1979	1980	1981	1982	1983 1/	
		DOL.	DOL.	DOL.	DOL.	DOL.	DOL.
FOOD GRAINS							
WHEAT, ALL 2/	BU.	3.78	3.91	3.65	3.55	3.54	3.97
RYE 2/	BU.	2.06	2.64	2.99	2.37	2.10	2.32
RICE 2/	CWT.	10.50	12.80	9.05	8.11	8.82	10.41
FEED GRAINS AND HAY							
CORN FOR GRAIN 2/	BU.	2.52	3.11	2.50	2.68	3.30	3.17
OATS 2/	BU.	1.36	1.79	1.89	1.48	1.69	1.81
BARLEY 2/	BU	2.29	2.85	2.45	2.23	2.56	2.58
SORGHUM GRAIN 2/	CWT.	4.18	5.25	4.27	4.50	5.16	5.25
HAY, ALL (BALED)	TON	59.50	71.00	67.10	68.80	76.20	77.48
DRY BEANS	CWT.	22.80	28.00	21.00	14.30	22.80	22.46
SUGARBEETS 3/	TON	33.90	47.20	29.20	35.40	36.90	39.62
SUGARCANE FOR SUGAR 3/	TON	26.00	38.50	24.90	26.50	27.90	31.50
COTTON, LINT (UPLAND) 4/	LB.	0.623	0.744	0.543	0.591	0.661	0.662
TOBACCO	LB.	1.41	1.52	1.71	1.77	1.75	1.89
OIL-BEARING CROPS							
COTTONSEED	TON	121.00	129.00	86.00	77.00	166.00	124.43
SOYBEANS FOR BEANS	BU.	6.28	7.57	6.04	5.69	7.87	7.35
PEANUTS HARVESTED FOR NUTS	LB.	0.206	0.251	0.269	0.251	0.241	0.273
FLAXSEED	BU.	5.97	7.20	6.73	5.19	6.77	6.93
FRUITS							
APPLES, COMMERCIAL CROP 5/	LB.	0.109	0.087	0.154	0.130	0.106	0.131
ORANGES, ALL 6/	BOX	4.85	5.30	6.61	5.85	7.18	6.98
GRAPEFRUIT, ALL 6/	BOX	4.14	4.74	3.25	3.06	3.95	4.18
VEGETABLES							
POTATOES	CWT.	3.43	6.55	5.41	4.45	5.69	5.91
SWEETPOTATOES	CWT.	8.92	13.60	13.60	7.90	12.30	12.05
		U.S AVERAGE ANNUAL PRICES					
LIVESTOCK							
STEERS AND HEIFERS	CWT.	69.80	66.90	62.40	61.50	60.10	69.27
FEEDER STEERS-8 MKTS	CWT.	75.10	69.75	63.10	62.03	60.71	69.63
COWS FOR SLAUGHTER	CWT.	50.00	45.70	41.30	38.50	38.10	44.96
CALVES	CWT.	88.70	76.80	64.00	59.80	61.70	69.81
SHEEP	CWT.	26.30	21.10	21.20	19.50	15.70	20.31
LAMBS	CWT.	66.70	63.60	54.90	53.10	53.90	59.72
HOGS	CWT.	41.80	38.00	43.90	52.30	46.80	50.82
DAIRY PRODUCTS							
MILK 7/	CWT.	12.00	13.00	13.80	13.60	13.60	14.74
POULTRY AND EGGS							
BROILERS, COMMERCIAL	LB.	0.259	0.277	0.285	0.269	0.286	0.300
TURKEYS	LB.	0.411	0.413	0.382	0.395	0.380	0.414
EGGS	DOZ.	0.583	0.563	0.631	0.595	0.611	0.669
WOOL	LB.	0.863	0.881	0.945	0.684	0.613	0.904

1/ PRELIMINARY
2/ INCLUDES ALLOWANCE FOR LOANS OUTSTANDING AND PURCHASES BY THE GOVERNMENT VALUED AT THE AVERAGE LOAN AND PURCHASE RATE, BY STATES.
3/ DOES NOT INCLUDE PAYMENTS UNDER THE SUGAR ACT.
4/ PRICES BASED ON 480 POUND NET WEIGHT BASE.
5/ BOTH FRESH AND PROCESSED SALE PRICES (EQUIVALENT PACKINGHOUSE-DOOR RETURNS FOR WASHINGTON AND OREGON, EQUIVALENT FIRST DELIVERY POINT FOR CALIFORNIA AND "AS SOLD" FOR OTHER STATES).
6/ EQUIVALENT PACKINGHOUSE-DOOR RETURNS PER BOX FOR ALL USES.
7/ SOLD TO PLANTS AND DEALERS.

Table 2: UNITED .TES: INDEXES OF PRICES RECEIVED BY FAR. ., PRICES PAID BY FARMERS, PRICES FOR CONSTRUCTION COSTS ITEMS AND CURRENT NORMALIZED INDEXES

COMMODITY		U.S. SEASON AVERAGE PRICES					CURRENT NORMALIZED PRICES
		1979	1980	1981	1982	1983 1/	
PRICES RECEIVED BY FARMERS							
ALL FARM PRODUCTS	1967=100	241	246	254	243	245	267
ALL CROPS	1967=100	223	241	257	232	244	262
LIVESTOCK AND LIVESTOCK PRODUCTS	1967=100	257	251	250	254	247	272
PRICES PAID BY FARMERS							
ALL COMMODITIES BOUGHT FOR USE IN PRODUCTION	1967=100	248	276	296	314	322	335
FEED	1967=100	204	230	249	227	249	260
LIVESTOCK	1967=100	293	281	259	259	253	283
SEED	1967=100	286	309	360	368	368	388
FERTILIZER	1967=100	196	243	261	261	248	273
AGRICULTURAL CHEMICALS	1967=100	150	160	174	187	196	201
FUELS AND ENERGY	1967=100	276	380	430	424	408	444
FARM AND MOTOR SUPPLIES	1967=100	189	221	243	251	251	267
AUTOS AND TRUCKS	1967=100	273	289	335	372	398	396
TRACTORS AND SELF-PROP. MACHINERY	1967=100	289	323	362	393	414	421
OTHER MACHINERY	1967=100	293	326	359	394	421	423
BUILDING AND FENCING MATERIALS	1967=100	272	293	307	309	316	336
WAGE RATES FOR HIRED FARM LABOR	1967=100	265	287	310	323	332	347
CONSTRUCTION COSTS							
COMPOSITE INDEX (U.S. DEPT. OF COMMERCE)	1967=100	273	304	325	327	334	354
ENR CONSTRUCTION COST	1967=100	280	301	329	356	379	383
WHOLESALE LUMBER PRICE (U.S. DEPT. OF LABOR)	1967=100	354	326	325	311	353	364

1/ PRELIMINARY

STATES CURRENT NORMALIZED PRICES FOR PRINCIPAL COMMODITIES

09/30/84

STATE	COMMODITIES										
	WHEAT ALL 1/	RYE 1/	RICE 1/	CORN FOR GRAIN 1/	OATS 1	BARLEY 1/	SORGHUM GRAIN	HAY, ALL BALED	DRY BEANS	SUGAR BEETS 2/	SUGAR CANE SUGAR 2/
	BUSHEL	BUSHEL	CWT.	BUSHEL	BUSHEL	BUSHEL	CWT.	TON	CWT.	TON	TON
MAINE	0.0	0.0	0.0	0.0	1.51	0.0	0.0	69.74	0.0	0.0	0.0
NEW HAMPSHIRE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.68	0.0	0.0	0.0
VERMONT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.75	0.0	0.0	0.0
MASSACHUSETTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.06	0.0	0.0	0.0
RHODE ISLAND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.68	0.0	0.0	0.0
CONNECTICUT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.87	0.0	0.0	0.0
NEW YORK	3.64	3.35	0.0	3.47	1.94	0.0	0.0	82.59	20.14	0.0	0.0
NEW JERSEY	3.59	2.90	0.0	3.36	2.23	2.10	0.0	106.19	0.0	0.0	0.0
PENNSYLVANIA	3.82	3.35	0.0	3.44	2.05	2.31	0.0	101.76	0.0	0.0	0.0
DELAWARE	3.62	2.80	0.0	3.33	0.0	2.05	0.0	96.96	0.0	0.0	0.0
MARYLAND	3.64	2.80	0.0	3.37	2.11	2.18	0.0	96.81	0.0	0.0	0.0
MICHIGAN	3.77	2.49	0.0	3.06	1.92	2.92	0.0	61.54	23.82	38.01	0.0
WISCONSIN	3.74	2.24	0.0	3.13	1.86	2.47	0.0	75.46	0.0	0.0	0.0
MINNESOTA	4.20	2.24	0.0	3.01	1.71	2.37	0.0	74.24	22.08	32.76	0.0
OHIO	3.71	3.26	0.0	3.13	1.97	0.0	0.0	96.50	0.0	39.21	0.0
INDIANA	3.68	2.86	0.0	3.09	2.15	0.0	4.70	79.54	0.0	0.0	0.0
ILLINOIS	3.64	2.68	0.0	3.17	2.38	0.0	4.94	65.88	0.0	0.0	0.0
IOWA	3.84	2.68	0.0	3.13	1.90	0.0	5.10	62.91	0.0	0.0	0.0
MISSOURI	3.56	2.95	11.02	3.23	2.30	0.0	5.01	68.50	0.0	0.0	0.0
NORTH DAKOTA	4.08	2.04	0.0	3.06	1.49	2.24	0.0	50.96	19.58	33.99	0.0
SOUTH DAKOTA	4.03	2.24	0.0	2.95	1.72	2.24	4.50	54.77	0.0	0.0	0.0
NEBRASKA	3.86	2.28	0.0	3.21	1.81	2.32	5.05	56.62	21.07	42.39	0.0
KANSAS	3.99	1.98	0.0	3.22	1.98	2.33	5.22	69.01	18.31	38.26	0.0
VIRGINIA	3.62	2.27	0.0	3.32	1.87	2.15	4.58	88.93	0.0	0.0	0.0
WEST VIRGINIA	3.86	0.0	0.0	3.22	1.81	2.53	0.0	72.01	0.0	0.0	0.0
NORTH CAROLINA	3.66	2.96	0.0	3.28	1.77	2.15	4.85	68.95	0.0	0.0	0.0
KENTUCKY	3.69	2.95	0.0	3.24	2.97	2.21	4.95	76.86	0.0	0.0	0.0
TENNESSEE	3.62	0.0	0.0	3.36	2.48	0.0	4.81	53.31	0.0	0.0	0.0
SOUTH CAROLINA	3.48	2.70	0.0	3.34	1.65	2.30	4.84	78.12	0.0	0.0	0.0
GEORGIA	3.53	2.46	0.0	3.42	1.75	0.0	4.96	69.46	0.0	0.0	0.0
FLORIDA	0.0	0.0	0.0	3.39	0.0	0.0	0.0	78.88	0.0	0.0	34.85
ALABAMA	3.53	0.0	0.0	3.37	1.99	0.0	5.41	66.80	0.0	0.0	0.0
MISSISSIPPI	3.64	0.0	10.82	3.56	0.0	0.0	4.90	55.20	0.0	0.0	0.0
ARKANSAS	3.73	0.0	10.92	3.33	2.30	0.0	4.87	55.39	0.0	0.0	0.0
LOUISIANA	3.88	0.0	10.55	3.53	0.0	0.0	5.04	55.02	0.0	0.0	29.40
OKLAHOMA	4.07	2.11	0.0	3.63	2.28	2.71	5.39	67.78	0.0	0.0	0.0
TEXAS	4.04	2.86	11.72	3.51	2.14	2.60	5.41	77.58	0.0	41.29	21.65
MONTANA	4.07	0.0	0.0	3.34	1.78	2.45	0.0	59.14	15.29	48.96	0.0
IDAHO	3.99	0.0	0.0	3.53	1.93	2.94	0.0	71.15	17.69	42.86	0.0
WYOMING	3.69	0.0	0.0	3.08	1.92	3.39	0.0	67.36	18.52	47.49	0.0
COLORADO	3.81	2.28	0.0	3.17	2.11	3.10	5.37	72.69	17.74	42.51	0.0
NEW MEXICO	4.03	0.0	0.0	3.45	0.0	2.85	5.53	90.67	0.0	42.31	0.0
ARIZONA	4.52	0.0	0.0	3.77	0.0	3.27	6.58	86.26	0.0	42.28	0.0
UTAH	3.83	0.0	0.0	3.83	2.20	2.75	0.0	73.45	17.71	0.0	0.0
NEVADA	3.88	0.0	0.0	0.0	0.0	2.89	0.0	90.61	0.0	0.0	0.0
WASHINGTON	4.31	0.0	0.0	3.62	1.90	2.61	0.0	81.82	20.03	0.0	0.0
OREGON	4.23	2.54	0.0	3.64	1.94	2.63	0.0	77.02	0.0	40.66	0.0
CALIFORNIA	4.45	0.0	8.50	4.06	2.54	3.24	6.14	95.47	32.94	40.17	0.0
ALASKA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HAWAII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.79

1/ INCLUDES ALLOWANCE FOR LOANS OUTSTANDING AND PURCHASES BY THE GOVERNMENT VALUED AT AVERAGE LOAN AND PURCHASE RATE. DOES NOT INCLUDE PRICE SUPPORT PAYMENTS.
2/ DOES NOT INCLUDE PAYMENTS UNDER THE SUGAR ACT.

-CONTINUED

STATE	COMMODITIES										
	COTTON, LINT UPLAND 3 /	TOBACCO	COTTON SEED	SOYBEANS FOR BEANS	PEANUTS HARVESTED FOR NUTS	FLAXSEED	APPLES COMMERCIAL 4	ORANGES ALL	GRAPEFRUIT ALL 5/	POTATOES	SWEET-POTATOES
	POUND	POUND	TON	BUSHEL	POUND	BUSHEL	POUND	BOX	BOX	CWT.	CWT.
MAINE	0.0	0.0	0.0	0.0	0.0	0.0	0.173	0.0	0.0	5.17	0.0
NEW HAMPSHIRE	0.0	0.0	0.0	0.0	0.0	0.0	0.189	0.0	0.0	0.0	0.0
VERMONT	0.0	0.0	0.0	0.0	0.0	0.0	0.175	0.0	0.0	6.07	0.0
MASSACHUSETTS	0.0	6.267	0.0	0.0	0.0	0.0	0.195	0.0	0.0	5.84	0.0
RHODE ISLAND	0.0	0.0	0.0	0.0	0.0	0.0	0.198	0.0	0.0	5.48	0.0
CONNECTICUT	0.0	5.949	0.0	0.0	0.0	0.0	0.181	0.0	0.0	6.29	0.0
NEW YORK	0.0	0.0	0.0	0.0	0.0	0.0	0.162	0.0	0.0	6.97	0.0
NEW JERSEY	0.0	0.0	0.0	7.19	0.0	0.0	0.147	0.0	0.0	7.70	14.31
PENNSYLVANIA	0.0	0.920	0.0	7.21	0.0	0.0	0.125	0.0	0.0	7.60	0.0
DELAWARE	0.0	0.0	0.0	7.43	0.0	0.0	0.145	0.0	0.0	9.22	0.0
MARYLAND	0.0	1.584	0.0	7.41	0.0	0.0	0.154	0.0	0.0	8.95	11.91
MICHIGAN	0.0	0.0	0.0	7.22	0.0	0.0	0.102	0.0	0.0	6.48	0.0
WISCONSIN	0.0	1.174	0.0	7.23	0.0	0.0	0.171	0.0	0.0	5.43	0.0
MINNESOTA	0.0	0.0	0.0	7.24	0.0	6.96	0.212	0.0	0.0	5.25	0.0
OHIO	0.0	1.855	0.0	7.42	0.0	0.0	0.186	0.0	0.0	7.10	0.0
INDIANA	0.0	1.954	0.0	7.33	0.0	0.0	0.158	0.0	0.0	6.81	0.0
ILLINOIS	0.0	0.0	0.0	7.56	0.0	0.0	0.151	0.0	0.0	5.44	0.0
IOWA	0.0	0.0	0.0	7.32	0.0	0.0	0.170	0.0	0.0	6.00	0.0
MISSOURI	0.677	1.949	111.98	7.32	0.0	0.0	0.168	0.0	0.0	0.0	0.0
NORTH DAKOTA	0.0	0.0	0.0	6.93	0.0	6.87	0.0	0.0	0.0	4.96	0.0
SOUTH DAKOTA	0.0	0.0	0.0	7.08	0.0	7.02	0.0	0.0	0.0	4.25	0.0
NEBRASKA	0.0	0.0	0.0	7.10	0.0	0.0	0.0	0.0	0.0	6.80	0.0
KANSAS	0.0	0.0	0.0	7.18	0.0	0.0	0.124	0.0	0.0	0.0	0.0
VIRGINIA	0.722	1.869	110.66	7.40	0.289	0.0	0.135	0.0	0.0	9.93	10.40
WEST VIRGINIA	0.0	1.921	0.0	0.0	0.0	0.0	0.126	0.0	0.0	0.0	0.0
NORTH CAROLINA	0.702	1.896	112.00	7.35	0.286	0.0	0.088	0.0	0.0	7.63	12.44
KENTUCKY	0.0	1.937	0.0	7.52	0.0	0.0	0.144	0.0	0.0	0.0	0.0
TENNESSEE	0.660	1.920	115.50	7.32	0.0	0.0	0.159	0.0	0.0	10.28	14.25
SOUTH CAROLINA	0.699	1.893	120.60	7.41	0.294	0.0	0.109	0.0	0.0	0.0	16.76
GEORGIA	0.656	1.893	130.08	7.22	0.268	0.0	0.120	0.0	0.0	0.0	12.05
FLORIDA	0.662	1.872	105.89	7.40	0.271	0.0	0.0	7.02	4.39	11.23	0.0
ALABAMA	0.665	0.0	116.35	7.22	0.266	0.0	0.0	0.0	0.0	10.38	12.33
MISSISSIPPI	0.679	0.0	117.18	7.45	0.233	0.0	0.0	0.0	0.0	0.0	11.74
ARKANSAS	0.668	0.0	116.17	7.42	0.0	0.0	0.105	0.0	0.0	0.0	14.48
LOUISIANA	0.651	0.0	113.60	7.45	0.0	0.0	0.0	0.0	0.0	13.01	7.03
OKLAHOMA	0.545	0.0	124.48	6.95	0.268	0.0	0.0	0.0	0.0	0.0	0.0
TEXAS	0.579	0.0	125.36	6.99	0.275	0.0	0.0	5.00	3.20	10.47	18.38
MONTANA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.97	0.0
IDAHO	0.0	0.0	0.0	0.0	0.0	0.0	0.146	0.0	0.0	5.12	0.0
WYOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.94	0.0
COLORADO	0.0	0.0	0.0	0.0	0.0	0.0	0.165	0.0	0.0	5.03	0.0
NEW MEXICO	0.724	0.0	128.11	0.0	0.311	0.0	0.136	0.0	0.0	6.56	0.0
ARIZONA	0.686	0.0	125.35	0.0	0.0	0.0	0.0	6.53	3.69	7.99	0.0
UTAH	0.0	0.0	0.0	0.0	0.0	0.0	0.120	0.0	0.0	5.22	0.0
NEVADA	0.770	0.0	141.45	0.0	0.0	0.0	0.0	0.0	0.0	4.84	0.0
WASHINGTON	0.0	0.0	0.0	0.0	0.0	0.0	0.125	0.0	0.0	4.66	0.0
OREGON	0.0	0.0	0.0	0.0	0.0	0.0	0.114	0.0	0.0	5.05	0.0
CALIFORNIA	0.753	0.0	134.62	0.0	0.0	0.0	0.122	6.68	4.28	10.79	14.48
ALASKA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HAWAII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3/ PRICES BASED ON A 480 POUND NET WEIGHT BALE.
4/ BOTH FRESH AND PROCESSED SALE PRICES (EQUIVALENT PACKINGHOUSE-DOOR RETURNS FOR WASHINGTON AND OREGON, EQUIVALENT FIRST DELIVERY POINT FOR CALIFORNIA AND "AS SOLD" FOR OTHER STATES).
5/ EQUIVALENT PACKINGHOUSE-DOOR RETURNS PER BOX FOR ALL USES.

-CONTINUED

STATE	COMMODITIES									
	STEERS AND HEIFERS	CALVES	SHEEP	LAMBS	HOGS	MILK 6/	COMMERCIAL BROILERS	TURKEYS	EGGS	WOOL
	CWT.	CWT.	CWT.	CWT.	CWT.	CWT.	POUND	POUND	DOZ	POUND
MAINE	54.53	58.29	38.98	94.81	49.29	15.90	0.291	0.0	0.876	0.845
NEW HAMPSHIRE	53.05	57.57	40.08	99.23	49.29	15.64	0.0	0.931	0.929	0.924
VERMONT	54.88	59.46	36.61	89.28	49.29	15.32	0.0	0.0	1.043	0.862
MASSACHUSETTS	53.79	64.70	44.13	105.84	49.29	15.72	0.0	0.852	0.951	0.887
RHODE ISLAND	52.29	64.70	0.0	0.0	49.29	15.64	0.0	0.0	0.889	0.0
CONNECTICUT	51.91	64.70	43.72	106.58	49.29	15.57	0.0	0.788	0.981	0.683
NEW YORK	55.29	69.28	22.36	62.65	50.81	14.82	0.0	0.412	0.618	0.742
NEW JERSEY	62.03	82.71	31.81	52.14	54.74	15.10	0.0	0.892	0.721	0.630
PENNSYLVANIA	64.83	85.00	21.78	70.06	53.77	15.18	0.304	0.497	0.645	0.639
DELAWARE	67.14	82.04	0.0	0.0	52.90	15.18	0.325	0.422	0.959	0.0
MARYLAND	67.14	82.04	21.47	59.25	52.90	15.21	0.325	0.422	0.787	0.696
MICHIGAN	62.61	67.46	18.79	58.82	50.88	14.74	0.318	0.440	0.572	0.614
WISCONSIN	63.61	110.36	14.93	60.14	49.66	14.32	0.295	0.397	0.528	0.606
MINNESOTA	62.87	70.48	16.56	60.37	50.84	14.03	0.300	0.390	0.548	0.626
OHIO	64.50	61.76	22.00	58.96	51.39	14.78	0.273	0.411	0.578	0.597
INDIANA	66.90	64.70	19.21	52.42	51.36	14.74	0.291	0.476	0.632	0.548
ILLINOIS	68.45	65.74	19.84	55.98	51.13	14.67	0.0	0.433	0.648	0.570
IOWA	68.90	69.45	21.36	58.92	50.62	14.28	0.400	0.397	0.538	0.607
MISSOURI	67.23	68.53	21.06	55.07	50.58	14.38	0.302	0.397	0.560	0.616
NORTH DAKOTA	67.74	70.01	16.11	54.41	47.05	13.52	0.0	0.383	0.470	0.771
SOUTH DAKOTA	70.06	74.36	20.37	59.55	50.45	13.95	0.0	0.393	0.426	0.897
NEBRASKA	70.51	73.95	22.58	59.41	50.88	14.38	0.450	0.387	0.491	0.664
KANSAS	68.75	71.84	22.55	62.17	49.88	15.10	0.0	0.347	0.549	0.711
VIRGINIA	61.70	61.34	17.65	58.95	51.05	15.07	0.289	0.467	0.791	0.713
WEST VIRGINIA	55.62	70.20	17.03	57.17	51.41	14.74	0.330	0.419	0.846	0.680
NORTH CAROLINA	58.10	61.55	22.54	58.68	50.81	16.00	0.278	0.422	0.727	0.671
KENTUCKY	60.48	63.27	17.44	60.85	51.73	14.60	0.284	0.0	0.611	0.568
TENNESSEE	60.25	62.97	19.30	62.93	50.45	14.78	0.284	0.0	0.692	0.666
SOUTH CAROLINA	59.68	62.81	0.0	0.0	48.67	16.69	0.286	0.415	0.643	0.0
GEORGIA	60.55	61.61	0.0	0.0	50.06	15.68	0.280	0.429	0.776	0.0
FLORIDA	65.28	68.78	0.0	0.0	49.37	17.87	0.284	0.0	0.554	0.0
ALABAMA	63.26	64.10	0.0	0.0	50.78	15.86	0.282	0.0	0.819	0.0
MISSISSIPPI	64.23	67.44	0.0	0.0	51.90	15.39	0.307	0.0	0.775	0.0
ARKANSAS	62.99	66.51	0.0	0.0	49.35	15.57	0.300	0.390	0.696	0.0
LOUISIANA	63.06	66.22	25.29	61.61	52.73	15.89	0.304	0.0	0.838	0.595
OKLAHOMA	68.52	68.49	17.90	59.28	50.60	15.39	0.305	0.390	0.807	0.677
TEXAS	71.34	69.41	21.96	60.78	48.52	15.79	0.318	0.412	0.767	1.161
MONTANA	67.09	69.79	15.68	52.80	47.02	14.35	0.0	0.0	0.628	1.003
IDAHO	68.11	68.42	16.79	57.90	48.04	13.77	0.0	0.0	0.616	0.832
WYOMING	69.15	74.80	16.92	55.02	50.94	14.17	0.0	0.0	0.615	1.021
COLORADO	71.46	74.91	18.30	61.81	51.74	16.04	0.0	0.398	0.696	0.859
NEW MEXICO	65.99	73.34	20.04	55.21	50.91	16.29	0.0	0.0	0.695	1.099
ARIZONA	71.67	71.00	19.41	61.36	54.25	15.07	0.0	0.0	0.588	0.707
UTAH	65.36	69.78	17.58	55.88	48.69	13.99	0.0	0.486	0.572	0.873
NEVADA	63.67	69.29	14.81	50.66	40.49	14.42	0.0	0.0	0.566	0.919
WASHINGTON	71.45	63.57	13.23	57.44	53.12	14.42	0.357	0.0	0.615	0.760
OREGON	63.15	65.84	14.47	57.72	52.22	14.92	0.379	0.447	0.637	0.732
CALIFORNIA	69.38	65.10	19.61	61.67	56.01	14.28	0.356	0.411	0.598	0.917
ALASKA	83.55	75.39	38.43	71.97	82.97	22.70	0.0	0.0	1.304	0.695
HAWAII	62.67	57.03	0.0	0.0	79.33	22.00	0.536	0.0	0.926	0.0

6/ SOLD TO PLANTS AND DEALERS.

INTEREST RATE FACTOR
8 3/8 PERCENT

COMPOUND INTEREST AND ANNUITY TABLES - 8.3750 PERCENT

NO. OF YRS. HENCE	PRESENT VALUE OF 1	AMORTI-ZATION	PRESENT VALUE OF AN ANNUITY OF 1 PER YEAR	AMOUNT OF AN ANNUITY OF 1 PER YEAR	PRESENT VALUE OF AN INCREASING ANNUITY	PRESENT VALUE OF A DECREASING ANNUITY
1	0.92272	1.08375	0.92272	1.0000	0.92272	0.92272
2	0.85142	0.56365	1.77414	2.0837	2.62555	2.69686
3	0.78562	0.39066	2.55976	3.2583	4.98241	5.25662
4	0.72491	0.30444	3.28467	4.5311	7.88205	8.54129
5	0.66889	0.25294	3.95356	5.9106	11.22650	12.49484
6	0.61720	0.21878	4.57076	7.4056	14.92969	17.06560
7	0.56950	0.19454	5.14026	9.0259	18.91622	22.20586
8	0.52549	0.17650	5.66575	10.7818	23.12016	27.87161
9	0.48488	0.16258	6.15064	12.6848	27.48412	34.02225
10	0.44741	0.15156	6.59805	14.7471	31.95825	40.62030
11	0.41284	0.14264	7.01089	16.9822	36.49947	47.63119
12	0.38093	0.13528	7.39182	19.4044	41.07069	55.02301
13	0.35150	0.12914	7.74332	22.0296	45.64015	62.76633
14	0.32433	0.12395	8.06765	24.8745	50.18083	70.83398
15	0.29927	0.11952	8.36692	27.9578	54.66988	79.20091
16	0.27614	0.11570	8.64307	31.2992	59.08817	87.84397
17	0.25480	0.11239	8.89787	34.9205	63.41983	96.74184
18	0.23511	0.10949	9.13298	38.8451	67.65185	105.87483
19	0.21694	0.10695	9.34993	43.0984	71.77378	115.22475
20	0.20018	0.10471	9.55011	47.7079	75.77736	124.77486
21	0.18471	0.10272	9.73481	52.7034	79.65625	134.50967
22	0.17044	0.10096	9.90525	58.1174	83.40583	144.41492
23	0.15726	0.09938	10.06251	63.9847	87.02291	154.47744
24	0.14511	0.09797	10.20763	70.3434	90.50558	164.68506
25	0.13390	0.09670	10.34152	77.2347	93.85302	175.02659
26	0.12355	0.09556	10.46507	84.7031	97.06532	185.49166
27	0.11400	0.09453	10.57908	92.7970	100.14338	196.07074
28	0.10519	0.09360	10.68427	101.5687	103.08877	206.75501
29	0.09706	0.09275	10.78133	111.0751	105.90362	217.53634
30	0.08956	0.09199	10.87089	121.3776	108.59049	228.40723
31	0.08264	0.09129	10.95354	132.5430	111.15238	239.36077
32	0.07626	0.09066	11.02979	144.6435	113.59254	250.39056
33	0.07036	0.09009	11.10015	157.7574	115.91449	261.49071
34	0.06492	0.08956	11.16508	171.9695	118.12193	272.65579
35	0.05991	0.08909	11.22499	187.3720	120.21869	283.88077
36	0.05528	0.08865	11.28026	204.0644	122.20870	295.16104
37	0.05101	0.08825	11.33127	222.1548	124.09593	306.49231
38	0.04706	0.08789	11.37833	241.7602	125.88438	317.87064
39	0.04343	0.08755	11.42176	263.0077	127.57805	329.29240
40	0.04007	0.08725	11.46183	286.0345	129.18091	340.75423
41	0.03697	0.08697	11.49881	310.9899	130.69688	352.25304
42	0.03412	0.08671	11.53293	338.0353	132.12982	363.78597
43	0.03148	0.08647	11.56441	367.3458	133.48350	375.35037
44	0.02905	0.08626	11.59345	399.1110	134.76162	386.94383
45	0.02680	0.08606	11.62026	433.5366	135.96777	398.56409
46	0.02473	0.08587	11.64499	470.8453	137.10545	410.20908
47	0.02282	0.08571	11.66781	511.2785	138.17803	421.87689
48	0.02106	0.08555	11.68887	555.0981	139.18878	433.56575
49	0.01943	0.08541	11.70830	602.5876	140.14085	445.27405
50	0.01793	0.08528	11.72623	654.0543	141.03728	457.00028

COMPOUND INTEREST AND ANNUITY TABLES - 8.3750 PERCENT

NO. OF YRS. HENCE	PRESENT VALUE OF 1	AMORTI-ZATION	PRESENT VALUE OF AN ANNUITY OF 1 PER YEAR	AMOUNT OF AN ANNUITY OF 1 PER YEAR	PRESENT VALUE OF AN INCREASING ANNUITY	PRESENT VALUE OF A DECREASING ANNUITY
51	0.01654	0.08516	11.74277	709.8314	141.88097	468.74305
52	0.01526	0.08505	11.75803	770.2797	142.67473	480.50108
53	0.01409	0.08495	11.77212	835.7907	143.42124	492.27320
54	0.01300	0.08485	11.78512	906.7881	144.12305	504.05832
55	0.01199	0.08477	11.79711	983.7316	144.78262	515.85543
56	0.01107	0.08469	11.80817	1067.1191	145.40229	527.66360
57	0.01021	0.08461	11.81838	1157.4904	145.98428	539.48198
58	0.00942	0.08455	11.82781	1255.4302	146.53072	551.30979
59	0.00869	0.08448	11.83650	1361.5725	147.04362	563.14629
60	0.00802	0.08443	11.84452	1476.6042	147.52491	574.99081
61	0.00740	0.08437	11.85192	1601.2698	147.97640	586.84273
62	0.00683	0.08433	11.85875	1736.3761	148.39984	598.70148
63	0.00630	0.08428	11.86505	1882.7976	148.79685	610.56653
64	0.00581	0.08424	11.87087	2041.4819	149.16900	622.43740
65	0.00537	0.08420	11.87623	2213.4560	149.51776	634.31363
66	0.00495	0.08417	11.88118	2399.8330	149.84451	646.19482
67	0.00457	0.08413	11.88575	2601.8190	150.15058	658.08057
68	0.00422	0.08410	11.88997	2820.7213	150.43722	669.97054
69	0.00389	0.08408	11.89386	3057.9567	150.70559	681.86439
70	0.00359	0.08405	11.89745	3315.0606	150.95682	693.76184
71	0.00331	0.08403	11.90076	3593.6969	151.19194	705.66260
72	0.00306	0.08401	11.90381	3895.6690	151.41195	717.56641
73	0.00282	0.08399	11.90663	4222.9313	151.61777	729.47304
74	0.00260	0.08397	11.90923	4577.6018	151.81029	741.38228
75	0.00240	0.08395	11.91163	4961.9760	151.99033	753.29391
76	0.00222	0.08394	11.91385	5378.5415	152.15868	765.20776
77	0.00204	0.08392	11.91589	5829.9943	152.31606	777.12366
78	0.00189	0.08391	11.91778	6319.2563	152.46316	789.04144
79	0.00174	0.08390	11.91952	6849.4941	152.60064	800.96096
80	0.00161	0.08388	11.92113	7424.1392	152.72910	812.88208
81	0.00148	0.08387	11.92261	8046.9108	152.84911	824.80469
82	0.00137	0.08386	11.92397	8721.8396	152.96122	836.72866
83	0.00126	0.08386	11.92524	9453.2937	153.06592	848.65390
84	0.00116	0.08385	11.92640	10246.0070	153.16370	860.58030
85	0.00107	0.08384	11.92747	11105.1101	153.25499	872.50777
86	0.00099	0.08383	11.92847	12036.1631	153.34022	884.43624
87	0.00091	0.08383	11.92938	13045.1918	153.41978	896.36562
88	0.00084	0.08382	11.93022	14138.7266	153.49403	908.29584
89	0.00078	0.08382	11.93100	15323.8449	153.56333	920.22684
90	0.00072	0.08381	11.93172	16608.2169	153.62799	932.15856
91	0.00066	0.08381	11.93238	18000.1551	153.68831	944.09095
92	0.00061	0.08380	11.93299	19508.6681	153.74458	956.02394
93	0.00056	0.08380	11.93356	21143.5190	153.79707	967.95750
94	0.00052	0.08379	11.93408	22915.2888	153.84603	979.89158
95	0.00048	0.08379	11.93456	24835.4442	153.89168	991.82614
96	0.00044	0.08379	11.93500	26916.4126	153.93425	1003.76115
97	0.00041	0.08378	11.93541	29171.6622	153.97394	1015.69656
98	0.00038	0.08378	11.93579	31615.7889	154.01093	1027.63235
99	0.00035	0.08378	11.93614	34264.6112	154.04542	1039.56849
100	0.00032	0.08378	11.93646	37135.2724	154.07756	1051.50495

COMPOUND INTEREST AND ANNUITY TABLES - 8.3750 PERCENT

NO. OF YRS. HENCE	PRESENT VALUE OF 1	AMORTI-ZATION	PRESENT VALUE OF AN ANNUITY OF 1 PER YEAR	AMOUNT OF AN ANNUITY OF 1 PER YEAR	PRESENT VALUE OF AN INCREASING ANNUITY	PRESENT VALUE OF A DECREASING ANNUITY
101	0.00030	0.08377	11.93676	40246.3515	154.10752	1063.44171
102	0.00027	0.08377	11.93703	43617.9834	154.13543	1075.37874
103	0.00025	0.08377	11.93728	47271.9895	154.16144	1087.31602
104	0.00023	0.08377	11.93752	51232.0187	154.18568	1099.25354
105	0.00022	0.08377	11.93773	55523.7002	154.20825	1111.19127
106	0.00020	0.08377	11.93793	60174.8101	154.22928	1123.12920
107	0.00018	0.08377	11.93811	65215.4505	154.24887	1135.06731
108	0.00017	0.08376	11.93828	70678.2444	154.26711	1147.00559
109	0.00016	0.08376	11.93844	76598.5474	154.28410	1158.94403
110	0.00014	0.08376	11.93858	83014.6758	154.29992	1170.88261
111	0.00013	0.08376	11.93871	89968.1548	154.31465	1182.82132
112	0.00012	0.08376	11.93884	97503.9878	154.32836	1194.76016
113	0.00011	0.08376	11.93895	105670.2428	154.34113	1206.69911
114	0.00010	0.08376	11.93905	114521.8886	154.35301	1218.63816
115	0.00010	0.08376	11.93915	124114.0968	154.36408	1230.57731
116	0.00009	0.08376	11.93924	134509.6524	154.37437	1242.51655
117	0.00008	0.08376	11.93932	145775.8357	154.38395	1254.45587
118	0.00008	0.08376	11.93940	157985.5620	154.39287	1266.39527
119	0.00007	0.08376	11.93947	171217.8528	154.40117	1278.33474
120	0.00006	0.08376	11.93953	185558.3480	154.40889	1290.27427
121	0.00006	0.08375	11.93959	201099.8596	154.41607	1302.21386
122	0.00005	0.08375	11.93964	217942.9729	154.42276	1314.15350
123	0.00005	0.08375	11.93969	236196.6968	154.42898	1326.09319
124	0.00005	0.08375	11.93974	255979.1702	154.43476	1338.03294
125	0.00004	0.08375	11.93978	277418.4257	154.44014	1349.97272
PERPETUITY		0.08375	11.94030		154.51103	

* U.S. Government Printing Office : 1984 -460-930/1024