

Department of

AGRICULTURE

MEASUREMENT STANDARDS



County Department of Agriculture/Measurement Standards

2156 Sierra Way San Luis Obispo, CA 93401 (805) 549-5910

Agricultural Commissioner/Sealer of Weights and Measures
Richard D. Greek

Assistant Agricultural Commissioner Robert F. Lilley

Chief Deputy Sealer of Weights and Measures Stephen F. Morrison

> Deputy Agricultural Commissioner Stewart Williams

> Deputy Agricultural Commissioner Robert L. Hopkins

Supervising Administrative Clerk Judy A. Noble

Agricultural Inspector/Biologists

Warren E. Howell
Edward L. Ingram
Janice M. Campbell
Carol L. Smithback
Charles B. Alender
Deborah L.K. Barker
Catherine D. Krause
Christine E. Crump
Suzanne R. McCaslin
Brenda W. Ouwerkerk
Brenda D. Protopapas
Rusty Hall
P. Kim Frank
Beverly Delwiche
Alicia Doran

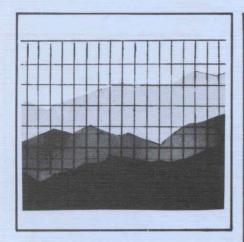
Pest Detection Trappers

Gail E. Perez Judy Fraser Sandy Jordan Jennifer Weaver Weights and Measures Inspection Staff Bernarr M. Boaz (Technical Deputy) Lance G. Millspaugh Jan G. Hendrix

Administrative Services Staff

Linda U. Leos Charlean Davis Troy L. Wolverton – Duque Stella Schmidt

Weed Eradication Team R. Michael Grainger Susan Ayres



TO: Honorable Board of Supervisors

Jerry Deifenderfer
District One
William Coy
District Two
Evelyn Delany
District Three
Ruth Brackett, Chairman
District Four
Carl Hysen
District Five

AND: Clare Berryhill, Director

California Department of Food and Agriculture

AND: William Briam, Administrative Officer

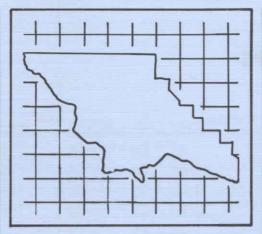
Agricultural commodities in San Luis Obispo County were valued at an estimated \$213,401,900 during 1985. This figure represents gross receipts and does not account for any expenses incurred by agri-business. No attempt has been made to calculate the net income of the county's farms and ranches.

Financial difficulties continued to impact agriculture during 1985. Consequently, San Luis Obispo's total crop value has not rebounded to the record level of \$229,407,00 set in 1983. A brief overview of each major commodity group follows:

Animal Industry. Generally prices remained depressed for livestock and related products. However, the horse industry is continuing to grow in size and value.

Field Crops. Dryland crops continued to decline in value as a result of a second drought year. Decreased acreage, reduction in yields and generally lower prices contributed to the decline.

Fruit and Nut Crops. These crops collectively showed a modest increase primarily due to higher values for avocados and lemons. Production was generally up except for the nut crops which were severely hurt by a spring frost.



Vegetable Crops. Production per acre was above the 1984 level for most crops. The county's harvested acreage decreased slightly and prices fluctuated with notable increases for bell peppers and carrots.

Nursery and Seed Stock. The increased value is due to an expanding industry and improved data collection methods.

Our annual report includes a financial statement and description of program functions and activities. In addition, we have incorporated a special report on the history and responsibilities of the weights and measures programs. I wish to thank the agricultural community and the department's staff for their assistance and effort in developing this report.

Richard Greek

Richard Greek

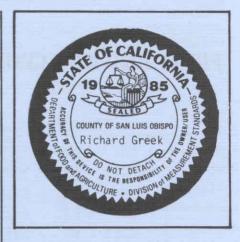
Agricultural Commissioner/Sealer

Recognitions. The department wishes to recognize two employees who have retired after serving the county for over fifteen years, Warren Howell and Stewart Williams. Warren worked as an Agricultural Inspector primarily in the fruit and vegetable standardization program which ensures the consumer of high quality products.

Stewart worked as a Deputy Commissioner in charge of the Oceano District Office. Stew brought farming experience, wisdom, and a practical approach to the job. He provided invaluable leadership for the department's pesticide program and was instrumental in resolving many difficult issues.

Stewart was honored by the Board of Supervisors on March 18, 1986. The following resolution was offered and read:

WHEREAS, Stewart W. Williams has worked for the County Department of Agriculture/Measurement Standards since June 29th, 1971; and



WHEREAS; on February 5th, 1979, Stewart W. Williams accepted appointment as a Deputy Agricultural Commissioner and has carried out the duties of that position in an exemplary manner; and WHEREAS; Stewart W. Williams has been a dedicated county employee serving agriculture and the citizens of San Luis Obispo County; and

WHEREAS; Stewart W. Williams utilized his education and background as a farmer to provide leadership to staff, guide and recommend department policy and procedures to management; and

WHEREAS; Stewart W. Williams played a key role in staff selection, pesticide program implementation and improving general departmental performance; and

WHEREAS; Stewart W. Williams utilized his people skills effectively to develop staff and provide professional and courteous public service; and

WHEREAS; Stewart W. Williams insured sensitive and reasonable enforcement programs in a manner that developed respect and friendship.

NOW, THEREFORE, BE IT RESOLVED by the San Luis Obispo County Board of Supervisors, State of California, that Stewart W. Williams is commended for his many years of service to the county; and

BE IT FURTHER RESOLVED, that Stewart W. Williams is thanked for his professional dedication and he and his wife, Judy, are wished a long and productive retirement.

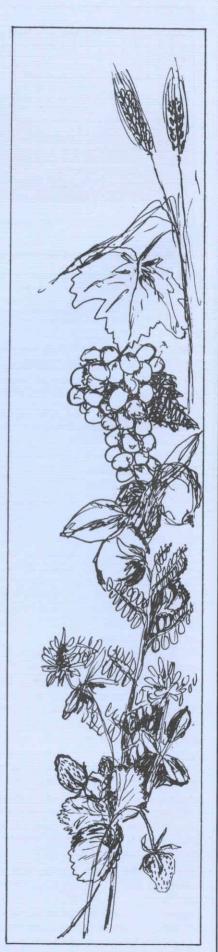
The Cover: Our cover depicts three examples of the relationship between San Luis Obispo's agricultural industry and the measurement standards division of the department. Measurement Standards plays a vital role in the orderly movement of agricultural products through marketing channels. On pages eight and nine we provide a historical summary and present day description of the measurement standards programs.

FRUIT AND NUT CROPS

Crop Ye	ar Ac	vested reage	Per A	cre	PRODUCTION Total	Unit	Per Uni	t VALUE	Total
Almonds	85 84	5,949	0:	006	36 251	Ton	1,20	8	43,200
Apples19	85 84	356 306	6.	000	2,136 918	Ton	32		694,200 293,800
Avocados19		1,523	2:	500 190	3,808 1,812	Ton	85 54	0	3,236,800
Grapes (Wine)19		5,480	4	400	24,112 23,551	Ton	40	7	9,814,000
Kiwi Fruit19		101	1:	500 100	152 111	Ton Ton	1,43	0	217,400 237,900
Lemons		830 830	16:	500	13,695 14,359	Ton Ton	28 19	0	3,834,600
Walnuts19		3,054 2,975	0:3	220 490	1,672 1,458	Ton Ton	67 77	8	1,134,000
Strawberries19		212 212	26.0	000	5,512 5,088	Ton	62 54	5	3,445,000 2,748,000
*Miscellaneous198	35 34	420 394							1,840,000
TOTAL FRUIT 198	35 1	7;925							23,580,800
*Apricots, Bushberrie	es, Gua	avas, V	alencia	or	anges, Pistachio				

FIELD CROPS

Crop	Year	Harvested Acreage	Per Acre	PRODUCTION Total	Unit	Per Unit	VALUE	otal
			TOT NOTE			TEL ONIC		====
Alfalfa Hay	··1985	7,245 9,345	6.50	47,093 56,070	Ton	\$ 94.00	\$ 4,427,	000
Barley	··1985	90,000	0.80	72,000 108,570	Ton	108.00	7,776,	000
Garbanzo	··1985	1,750	5.00	3,750 4,400	Cwt	34.00 33.00	127, 145,	500
Grain Hay	··1985	35,000 19,000	1.80	63,000 57,000	Ton	70.00 68.00	4,410, 3,876,	000
Grain Stubble	··1985	135,000			Acre	4.00	540, 660,	000
Irrigated Pasture.	··1985	5,900			Acre	200.00	1,180,	000
Range/Dryland	··1985	1,084,000			Acre	6.00	6,504, 7,316,	000
Safflower	··1985	2,165 1,665	0.34	736 333	Ton	240.00	176,	600
Sugar Beets	··1985	761	See Miscel	laneous Crops 18,797	Ton	30.98	582,	
Wheat	··1985	21,200	0.70	14,840 11,000	Ton	113.00	1,677,	000
*Miscellaneous	1985	3,800 3,861					730, 893,	000
TOTAL FIELD CROPS	1985 1984	1,385,060					\$27,548, \$33,712,	
*Silage Corn, Dry	Beans,		Sundangra	ss			933,712,	000



ANIMAL INDUSTRY

Commodity	Year Numb	er of Head Pro	oduction	Unit	Per Unit VALU	E Total
Cattle and	1985 8 1984 8	5,000	467,500 522,000	Cwt \$	54.00 54.00	\$25,245,000 28,188,000
Hogs	1985 1984	4,275	9,630	Cwt	47.00 48.00	452,600 635,700
	1985 1984	1,200		Each Each	1,600.00	1,920,000
Race/Show	1985 1984	1,100		Each 2	2,000.00	24,200,000
Market Milk	1985 1984	**	318,000	Cwt	12.48	**4,841,900
Sheep and	1985 1984	8,560 8,750	9,675 9,188	Cwt	70.00 63.00	677,300 578,800
	1985 1984		76,600 93,000	Lbs Lbs	0.63	48,300 37,200
Honey	1985 1984		208,000	Lbs	0.55	114,400 227,800
*Miscellaneous	1985 1984					2,850,000
	1985 1984				*	\$59,476,600
*Eggs, Poultry, Go: **Revised	ats, Game	Birds				

VEGETABLE CROPS

		Harvested	Pl	RODUCTION		VA	LUE
Crop	Year	Acreage	Per Acre	Total	Unit	Per Unit	Total
Beans (Green)	·1985	355 397	424 450	150,250 178,650	30#	\$ 8.32 7.79	\$ 1,252,000
Broccoli	·1985 1984	4,176 4,313	500 441	2,088,000	23# 23#	4.96 5.11	10,357,000 9,719,000
Cabbage	·1985 1984	526 577	791 723	416,066 417,171	45# 45#	3.53 4.34	1,469,000
Carrots	·1985 1984	1,422	32 26	45,504 35,620	Ton	205.44 124.00	9,348,000
Cauliflower	·1985 1984	1,690	542 518	915,980 639,212	25# 25#	6.09	5,578,000 3,675,000
Celery	·1985 1984	1,053	1089 1079	1,136,187	60#	5.29 5.25	5,127,000 5,965,000
Chinese Vegetables	.1985 1984	735 756	611 717	449,085 542,052	80# 80#	6.68	3,000,000
Lettuce	·1985	8,956 9,793	620 549	5,552,720 5,376,357	50# 50#	5:08 5:10	28,208,000 27,419,000
Lettuce Leaf	·1985 1984	751 518	824 838	618,824 434,084	50# 50#	4:44	2,748,000
Peas Edible Pod	·1985	3,344	85 89	284,240 416,520	45# 45#	42.75 43.89	12;151;000
Peppers	·1985 1984	499 599	616 559	307,384 334,841	30#	7.93 5.71	2,438,000
Romaine	·1985 1984	310 484	869 779	269,390 377,036	60# 60#	4.18	1;126;000
*Miscellaneous	·1985 1984	1,605					5,321,000 5,836,000
TOTAL Vegetable Crops	1985 1984	25,259 27,496					\$88,123,000
*Anise, Artichoke	, Brus	ssel Sprout,	Chili Pepp	er, Parslev,	Spinach	Squash,	

Sweet Corn, Tomato, Tomatillos, Watermelon





NURSERY STOCK

Crop	Year	Harvested Acreage	Greenhouse Production (sq ft)	Value
Cut Flowers	1985		1,508,000	\$ 5,264,000 3,682,000
Woody Ornamentals	1985 1984	54 36	148,000	1,489,000
Fruit & Nut Trees Vegetable Transplants	1985 1984	51 40		3,926,000 2,647,000
Indoor Decoratives	1985 1984		710,730 256,064	2,290,000
Christmas Trees, Cut	1985 1984	103 141		217,800 230,600
*Miscellaneous	1985 1984	10	80,000 75,000	660,000 405,000
TOTAL NURSERY STOCK	1985 1984	218 227	2,298,730	\$13,846,800
*Small producers				

CROP SEED

Crop	Year	Harvested Acreage	Value
Vegetable	1985	201 330	219,600 186,000
Barley	1985	2,630	388,000
Oats	1985 1984	2,753	199,000
*Miscellaneous	1985 1984	115 115	20,000
TOTAL SEED CROP	1985 1984	3,699 2,445	826,600 405,300
*Flower Seed			

TOTAL PRODUCTION ACREAGE

1985: 1,432,122 1984: 1,458,989

TEN YEAR VALUE COMPARISON

YEAR	ANIMAL	FIELDS	FRUIT & NUTS CROPS	VEGETABLE CROPS	NURSERY & SEED	VALUATIONS
1976	26,167,500	19,585,500	6,443,840	34,999,600	6,185,000	93,381,440
1977	28,405,800	12,457,200	7,284,000	41,400,600	3,151,000	92,698,600
1978	31,400,000	20,646,000	10,255,000	60,664,000	5,195,000	128,160,000
1979	47,242,600	25,026,000	22,875,000	45,700,000	7,006,000	147,849,600
1980	40,012,300	41,775,000	18,921,000	51,499,000	7,846,000	160,053,300
1981	41,945,500	36,842,000	18,109,000	84,789,000	8,982,000	190,667,500
1982	58,998,000	39,825,000	21,317,000	78,510,000	9,509,000	208,159,000
1983	60,383,000	45,091,000	18,933,000	97,139,000	7,871,000	229,407,000
1984	*58,229,400	33,712,000	19,433,000	87,403,000	10,396,000	*209,173,400
1985	59,476,600	27,548,100	23,580,800	88,123,000	14,673,400	213,401,900
	*REVISED					

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Major Accomplishments of Agricultural Commissioner

Administration

The County Department of Agriculture/Measurement Standards had a successful transition during 1985. The assistant agricultural commissioner and deputy commissioner positions were filled by highly qualified departmental personnel. The department gained one allocated position to further increase supervision for the state funded insect trapping program.

The department benefitted from computerization and reorganization at the management level. Land use planning became an integral element in the Commissioner's workload with case by case evaluation of proposals affecting agricultural land use.

Pesticide Use Enforcement

The pesticide use enforcement program continued with a strong commitment to worker and public health and safety. Major workload accomplishments included 1,292 restricted material permits issued by agricultural inspectors; review of 6,667 notice of intents to use restricted materials; 1,416 field inspections; and completion of 49 investigations.

Additionally, the department orchestrated the collection and disposal of household pesticide wastes. The Commissioner's role and responsibility in responding to hazardous materials incidents involving pesticides was further defined. In response to public concern, staff sampled and certified locally grown watermelons as free fromillegal pesticide residue.

The department initiated a program to assure compliance with newly legislated laws and regulations governing structural pest control. This new program expands the Commissioner's responsibilities for regulating pesticides.

Pest Prevention

The Commissioner's Office uses a threefold defense against invading pests. The first line of defense is the pest exclusion program. There were 6,618 shipments of plant material inspected, resulting in 37 rejections of potentially detrimental pests. The department also certified 232 outgoing shipments of plant material to other states and countries.

The pest detection program constitutes our second line of defense. Biologists performed 24,793 trap servicings on 1,264 traps located countywide. Additionally, 351 miles of railroad and roadside right-of-ways were inspected for noxious weeds. A total of 137 high hazard, cropland and special survey properties were inspected for a variety of pests.

Our third line of defense is the pest eradication program. The Agricultural Commissioner initiated a cooperative program with state and federal authorities to eradicate *Salsola vermiculata*, a noxious weed of which the only known infestation in the entire United States is in San Luis Obispo County. Ongoing efforts against skeleton weed and oblong spurge further reduced known infestation densities with a corresponding reduction in herbicide usage.

Pest Management

There were 1,252 properties treated with vertebrate control materials supplied by the Commissioner's Office. Staff efforts resulted in an effective problem-free program that adequately protected non-target wildlife.

The first known county infestation of western grapeleaf skeletonizer was detected during the later part of 1985. Subsequently, the department initiated a progressive biological control program to reduce the infestation to manageable levels while minimizing pesticide usage.

The department's right-of-way weed control program along roads within the county reduces fire hazards, increases visibility, and inhibits noxious weed encroachment onto agricultural properties. The program's effectiveness was further enhanced by careful weed surveying, selective herbicides and excellent record keeping.

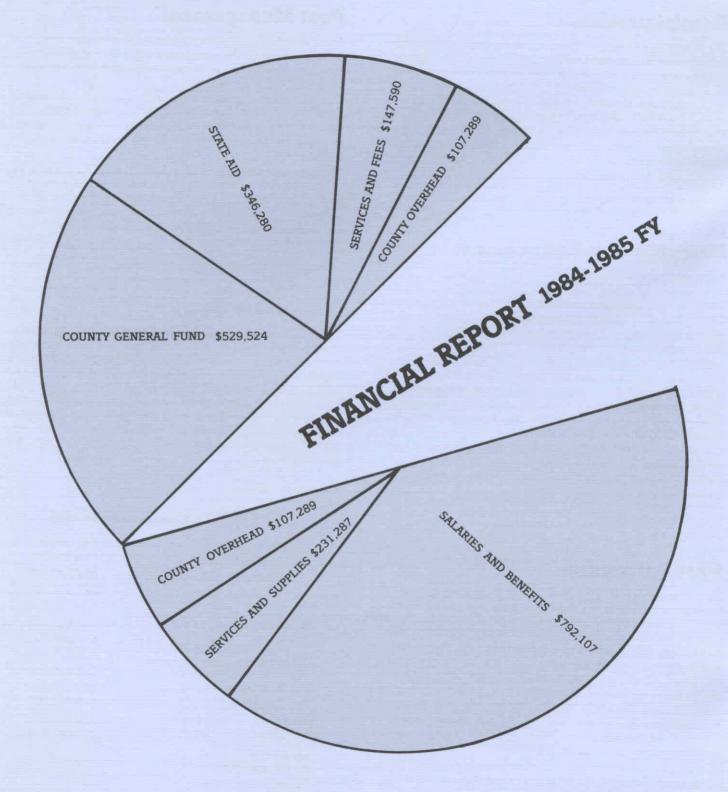
Inspection Services

Our largest function within this program consists of lettuce inspection in which 5,552,720 cartons of lettuce were statistically sampled for compliance with quality standards. One-hundred-eighteen nurseries were inspected for pest cleanliness and compliance with labeling requirements. Additionally, 324 lots of seed were inspected. Staff responded to a number of bee complaints with subsequent investigations and action to alleviate threatened public health and safety. Ninety-nine staff days were spent compiling the annual report and responding to land use planning issues.

TOP TWENTY CROPS and VALUES

1.	Lettuce, Iceberg	\$2	28,208,000	
	Cattle and Calves	\$2	25,245,000	
3.	Horses, Race/Show/Investment	\$2	24,200,000)
4.	Peas, Edible Pod	\$1	2,151,000)
5.	Broccoli	\$1	10,357,000)
6.	Grapes, Wine	\$	9,814,000)
7.	Carrots	\$	9,348,000)
8.	Barley	\$	7,776,000)
9.	Range/Dryland	\$	6,504,000)
10.	Cauliflower	\$	5,578,000)
11.	Cut Flowers		5,264,000	
12.	Celery	\$	5,127,000)
13.	Alfalfa hay	\$	4,427,000)
14.	Grain hay	\$	4,410,000)
15.	Market Milk	\$	3,969,000)
16.	Fruit, Nut Tree and	-		
	Vegetable Transplants		3,926,000	
17.	Lemons	- 5	3,834,000	
18.	Strawberries		3,445,000	
-	Avocados		3,236,000	
20.	Chinese Vegetables	\$	3,000,000)

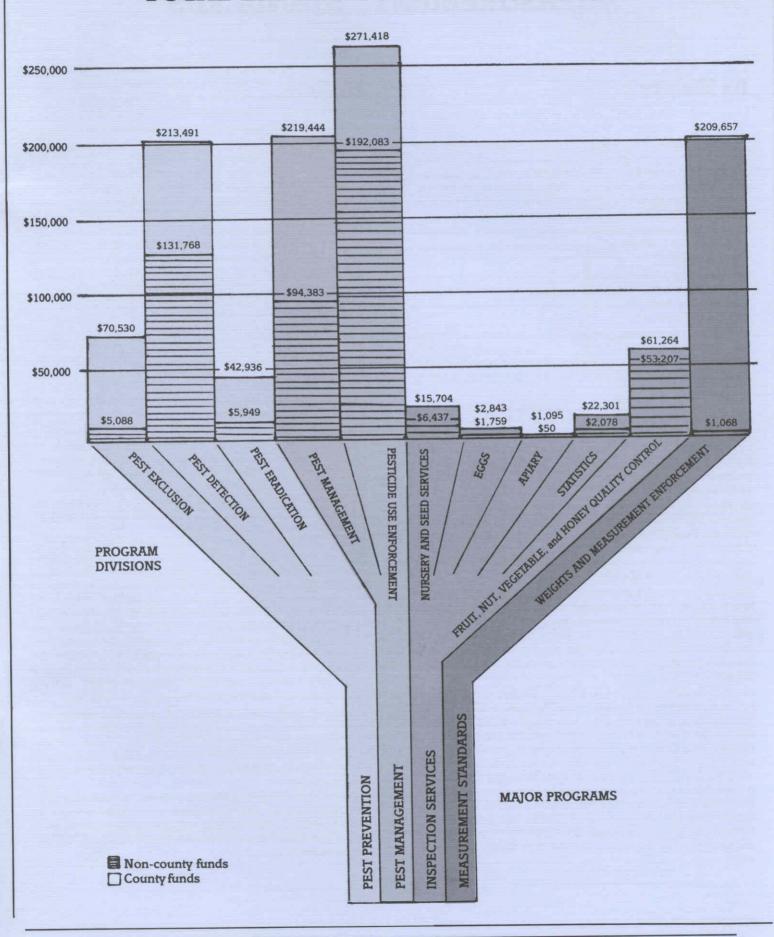
FUNDING SOURCES \$1,130,683



EXPENDITURES \$1,130,683

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TOTAL EXPENDITURES BY PROGRAM



MEASUREMENT STANDARDS

Its History

The states' power to regulate weights and measures, at the time and place of sale, pre-dates the U.S. Constitutional Convention of 1787 and received explicit approval by the U.S. Supreme Court as early as 1898. The first weights and measures law was passed by Congress and signed by President John Adams on March 2, 1799.

In 1913, the California Legislature created the office of Weights and Measures. This action provided for a state sealer and a deputy in each county.

San Luis Obispo County did not have a deputy sealer of weights and measures until 1915 when a legislative amendment of the general laws made the deputy sealer into a county sealer of weights and measures.

In 1921 San Luis Obispo County funds were first used to pay the sealer's salary, \$150 per month plus expenses. By 1927 things were looking up for the county sealer of weights and measures, when a legislative amendment allowed for a salary of \$200 per month.

The first county sealer was R.L. Dempsey who served from 1915 through 1931. He was replaced by A.B. Hitchcock who served from 1931 through 1955. Thomas Chalmers served during the period of 1955 thorugh 1963 and Earl R. Kalar served the years 1963 through 1984. In 1984 Richard Greek was appointed to replace Earl Kalar and is the present Sealer of Weights and Measures.

California laws pertaining to weights and measures were first approved June 16, 1913, and consisted of ten pages. The California Business and Professions Code and the California Administrative Code, which contain the laws governing weights and measures today, contain a total of 371 pages. We definitely live in a more complex world.

There are no available county records as to what the first equipment was like, but old timers tell us gasoline was tested with one five gallon gasoline measure and cattle scales were tested with a total of 250 pounds by using calibrated fifty pound weights which were hand carried onto the scale. Today, we have special weight trucks that carry and move weights weighing up to 1000 pounds.

From its beginning in San Luis Obispo, Weights and Measures has been a part of the Department of Agriculture. The majority of commerce, in the early days, was directly related to agricultural crops. Commerce has changed over the years, but traditionally, Weights and Measures has stayed as part of the Department of Agriculture. In San Luis Obispo County we still deal with a high volume of agriculture products including the farmers market, feed and grain, produce, and the sale of livestock. However, this is only part of the overall commerce of the county. Tourism, light industry, and the influx of more people to our central coast paradise is continually increasing the number and complexity of the businesses that the department has to deal with.

Its Role

Today, the Department of Measurement Standards, as mandated by California state law, is responsible for guaranteeing that equity prevails in all commercial transactions involving weight, measure or count. This responsibility is divided into six categories as explained below. All complaints to the department are investigated, and based on the findings, proper action is taken. Inspectors are required to be certified by the California State Department of Food and Agriculture's Division of Measurement Standards for each category in which they work.

Weighing Devices. Every commercial weighing device is tested according to frequency of inspection and regulations as established by the California Business and Professions Code. For most devices this represents a minimum of one test per year. Each inspector is trained in the operating procedures for each type of device, the law pertaining to weighing devices, and is certified by the state of California. The types of scales tested are as follows: jeweler's scales, spring scales, counter scales, checkstand scales, platform scales, dormant scales, vehicle scales, hopper scales, and livestock scales. All scales are tested using a wide range of equipment from specialized weight trucks to weights ranging in size from 1/32 of an ounce to 1000 pounds.

Measuring Devices. Similar rules and regulations apply to measuring devices as apply to weighing devices. Measuring devices include the familiar retail meters found at service stations, wholesale meters, bulk truck meters, milk tanks, taxi meters, and cordage meters. Calibrated containers are used in testing all forms of meters measuring in volumetric units and range in size from 1 to 600 gallons.

Petroleum and Weighmaster. The petroleum program involves the enforcement of laws pertaining to the proper labeling of petroleum products, gasoline price sign advertising, and testing of gasoline samples for octane rating and adulteration. Action in these areas consists of taking samples of gasoline, and sending them to the state lab to determine the correctness of the posted octane number, the amount of alcohol in the product, and whether the gasoline is contaminated with water or other foreign substances. Price signs are also regulated to protect the consumer from false and misleading advertising. Items such as brake fluid, antifreeze, transmission fluid, and oils are routinely sampled and tested to guarantee compliance with the law.

A licensed weighmaster is anyone who issues a certificate of weight or count for a commodity without the buyer being present. Examples of commodities weighed by a weighmaster are household goods carried by moving companies, cement, sand and gravel, scrap metal, hay and other types of feed and agriculture products.

Inspectors are charged with auditing records to guarantee compliance with the law, and investigating questionable activities in relation to the issuance of false weights and illegal certificates. These operations are directly involved in the transfer of millions of dollars every year.

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Electric Meters. The department tests all electric meters that do not fall under the jurisdiction of the Public Utilities Commission. An example would be many mobile home parks where the individual meters are owned by the park. The same rules and regulations governing the meters owned by the utility companies apply to those owned privately, the only difference is that the Department of Weights and Measures enforces the laws and guarantees the accuracy of the meters that are privately owned.

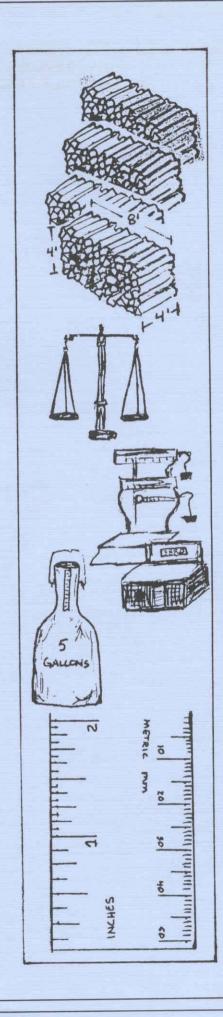
Compressed Gasses. Special equipment and skills are needed in testing gasses such as propane and butane in liquid form. Provers under pressure are used in checking propane meters at gasoline stations which fill home bottles and automobiles as well as the wholesale trucks that deliver the product to homes for cooking and heating. Gasses used in welding and other compressed gas in bottles are tested using either weight or special guages.

Package Inspection. Packaged goods are regularly tested for labeled weight, measure, or count. This is accomplished through random sampling using statistical methods. When a product is found to be short weight, an alert is issued state wide and all packages are tested. Packages found short weight are removed from sale throughout California. Undercover test purchases are made in stores to determine the accuracy of scales and the new scanners found in the marketplace. Local establishments, such as prepackaged meat markets, are tested regularly to guarantee that the packages contain the stated net contents. Proper labeling on all packaged goods is required and inspected by the department.

General Enforcement Information. If a device is found to be correct, a certificate of inspection is issued to the owner and a paper seal is placed on the device. This paper seal is the public's guarantee that the device is correct. If the device is found to be incorrect, it is condemned by affixing a red tag with a lead and wire seal and kept out of service until repaired. Packaged goods, if found short measure, are held off sale by special tags. Depending on the severity or intent, further action can be taken by issuing a notice of violation (a formal warning in writing), an office hearing, a district attorney hearing, a citation, or filing formal charges through the district attorney's office. These general enforcement procedures apply to all phases of weights and measures inspections and are used as tools to guarantee compliance with the law.

Special Effort. The staff has been involved in developing and issuing direct citations for the first time in the department's history. A new system for testing retail meters was invented and developed by staff and will be implemented in 1986. This system will greatly reduce lifting, help prevent back injuries, and increase the overall efficiency of the retail meter program. This will allow more time to be spent in non-device programs vital to the protection of consumers and industry in San Luis Obispo County. The total overall performance of the department is on the increase. We will continue to initiate new programs and approaches to meet problems encountered in the community.

Department of Measurement Standards Achievements in 1985. Measurement Standards staff inspected 2,733 devices, 146,794 packages, 252 weighmaster and petroleum establishments, answered 101 complaints, made 213 test purchases, issued 178 notices of violation, were involved in issuing 14 citations, and collected \$2,313 in infraction and misdemeanor fines.



County Department of Agriculture/Measurement Standards 2156 Sierra Way San Luis Obispo, CA 93401