APPENDIX B – PROJECT BACKGROUND SUPPORTING DOCUMENTATION

Table B-1
Acres Worked and Technical Assistance Hours

Yuba Land Class Acres Calendar Years 2007-2017

COUNTY	LAND CLASS	WT_PRP_NAME	ACRES
YUBA	**BLM LAND**	U. S. ARMY CORP OF ENGINEERS	**300**
	COUNTY OR CITY LAND	BROWNS VALLEY IRRIG:CA:52018	270
		MARYSVILLE HIGH SCHOOL:CA:52106	72
		MARYSVILLE SEWAGE PONDS:CA:52051	20
		RECLAMATION DISTRICT #10:CA:52139	500
		SYCAMORE RANCH:CA:02178	2,170
		YUBA COUNTY BUILDINGS AND GROUNDS	1
		YUBA COUNTY PUBLIC WORKS	21,180
	TOTAL COUNTY OR CITY		**24,213**
	OTHER PUBLIC LAND	MARYSVILLE POLICE DEPT.	1
		NEVADA IRRIGATION DISTRICT	15
	TOTAL OTHER PUBLIC		**16**
	PRIVATE LAND		**36,625**
	STATE LAND	BROPHY IRRIGATION DIST.:CA:52053	50
		CALIFORNIA DEPARTMENT OF TRANSPERTATION	2
		RECDIST784-UNIT2	5,000
		RECDIST784-UNIT4	3,500
		RECDIST784-UNIT5	2,000
		RECDIST784-UNIT6	300
		RECL. DIST. 784:CA:52135	18,000
		RECLAMATION DISTRIST 817	9,000
		SOUTH YUBA WATER DISTRICT:CA:52103	7,000
		SPENCEVILLE WILDLIFE AREA (YUBA COUNTY)	5,000
	TOTAL STATE		**49,852**
YUBA MISC. COUNTY PROJECTS	STATE LAND	CDWR SUTTER - BEAR	1,100
		CDWR SUTTER - INTERCEPTOR	400
	TOTAL OTHER		**1,500**
Grand Total			**112,506**

Table B-1
Acres Worked and Technical Assistance Hours

Yuba Hours by Work Task Form Type Calendar Years 2007-2017

Calendar Year	Administrative	Direct Controls	Technical Assistance	Grand Total
2007		2,006	81	2,086
2008	318	1,572	56	1,946
2009	343	1,276	99	1,718
2010	423	1,251	112	1,787
2011	241	1,482	115	1,839
2012	147	1,659	121	1,927
2013	96	1,882	82	2,059
2014	207	1,739	58	2,004
2015	128	1,473	100	1,701
2016	150	1,407	134	1,691
2017	103	1,591	32	1,726
Grand Total	**2,156**	**17,337**	**990**	**20,483**

Source: USDA APHIS-WS Management Information System 2019 (USDA 2019b)

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018

CALENDAR YEAR	COUNTY	CATEGORY	SUBCATEGORY	SPECIES	RESOURCE	Sum of TOTALDAMAGESLOSS
2007	YUBA	AGRICULTURE	LIVESTOCK	COYOTES	FOWL, CHICKENS (OTHER)	$245.00
				COYOTES	FOWL, TURKEYS (DOMESTIC)	$60.00
				COYOTES	GOATS, Z-(OTHER KIDS)	$110.00
				COYOTES	SHEEP (ADULT)	$700.00
				LIONS, MOUNTAIN (COUGAR)	EQUINE, DONKEYS/BURROS	$1,200.00
				LIONS, MOUNTAIN (COUGAR)	EQUINE, HORSES (ADULT)	$600.00
			OTHER	COYOTES	HIVES (BEES, HONEY, STRUCTURES)	$580.00
				SKUNKS, STRIPED	EGGS	$2.00
		AGRICULTURE Total				$3,497.00
		NATURAL RESOURCE	OTHER NATURAL RESOURCES	BEAVERS	STREAMS	$2,800.00
		NATURAL RESOURCE Total				$2,800.00
		PROPERTY	EQUIPMENT	DOGS, FERAL, FREE-RANGING AND HYBRIDS	VEHICLES, LAND	$100.00
			LANDSCAPING, TURF AND GARDENS	BEAVERS	TREES, STANDING/SHRUBS	$2,600.00
				OPOSSUMS, VIRGINIA	Z-LANDSCAPING (OTHER)	$15.00
				RACCOONS	TURF AND/OR FLOWERS	$2,120.00
				SKUNKS, STRIPED	GARDENS, VEG./FRUITS/NUTS	$15.00
				SKUNKS, STRIPED	TURF AND/OR FLOWERS	$270.00
				SKUNKS, STRIPED	Z-LANDSCAPING (OTHER)	$90.00
				SQUIRRELS, GROUND, CALIFORNIA	TURF AND/OR FLOWERS	$300.00
			OTHER PROPERTY	BEARS, BLACK	PROPERTY (GENERAL)	$100.00
				BEAVERS	PROPERTY (GENERAL)	$1,300.00
				OPOSSUMS, VIRGINIA	FOOD ITEMS, NON-HUMAN *	$20.00
				OPOSSUMS, VIRGINIA	PROPERTY (GENERAL)	$40.00
				RACCOONS	FOOD ITEMS, HUMAN	$30.00
				RACCOONS	FOOD ITEMS, NON-HUMAN *	$58.00
				RACCOONS	PROPERTY (GENERAL)	$40.00
				SKUNKS, STRIPED	FOOD ITEMS, NON-HUMAN *	$10.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$60.00
				SQUIRRELS, GROUND, CALIFORNIA	PROPERTY (GENERAL)	$200.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$300.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$2,340.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$6,830.00
				BEAVERS	ROADS/BRIDGES	$4,180.00
				COYOTES	IRRIGATION, DRIP LINE	$500.00
				OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$1,045.00
				RACCOONS	BUILDINGS, NON-RESIDENTIAL	$20.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$110.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$420.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$870.00
				SKUNKS, STRIPED	IRRIGATION DITCH/DRAINAGE SYSTEM	$20.00
				SQUIRRELS, GROUND (OTHER)	BUILDINGS, NON-RESIDENTIAL	$20.00
		PROPERTY Total				$24,023.00
2007 Total						**$30,320.00**
2008	YUBA	AGRICULTURE	FIELD CROPS	BEAVERS	GRAINS, RICE	$40.00
			LIVESTOCK	BOBCATS	FOWL, GUINEAS	$130.00
				BOBCATS	FOWL, TURKEYS (DOMESTIC)	$45.00
				BOBCATS	SHEEP (LAMBS)	$500.00
				COYOTES	CATTLE (CALVES)	$500.00
				COYOTES	FOWL, CHICKENS (OTHER)	$485.00
				COYOTES	FOWL, GEESE (DOMESTIC)	$75.00
				COYOTES	FOWL, TURKEYS (DOMESTIC)	$40.00
				COYOTES	GOATS, Z-(OTHER ADULTS)	$650.00
				COYOTES	GOATS, Z-(OTHER KIDS)	$600.00
				COYOTES	SHEEP (LAMBS)	$385.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, Z-(OTHER ADULTS)	$695.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, Z-(OTHER KIDS)	$300.00
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$205.00
			OTHER	COYOTES	HIVES (BEES, HONEY, STRUCTURES)	$500.00
		AGRICULTURE Total				$5,150.00

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018						
CALENDAR YEAR	**COUNTY**	**CATEGORY**	**SUBCATEGORY**	**SPECIES**	**RESOURCE**	**Sum of TOTALDAMAGESLOSS**
2008	**YUBA**	NATURAL RESOURCE	**OTHER NATURAL RESOURCES**	BEAVERS	STREAMS	$3,730.00
		NATURAL RESOURCE Total				$3,730.00
		PROPERTY	**ANIMAL**	COYOTES	PETS (COMPANION/HOBBY ANIMALS)	$40.00
			LANDSCAPING, TURF AND GARDENS	OPOSSUMS, VIRGINIA	TURF AND/OR FLOWERS	$20.00
				SKUNKS, STRIPED	TURF AND/OR FLOWERS	$60.00
			OTHER PROPERTY	BEAVERS	PROPERTY (GENERAL)	$1,000.00
				RACCOONS	PROPERTY (GENERAL)	$40.00
				SKUNKS, STRIPED	CLOTHING	$300.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$65.00
				SQUIRRELS, GROUND, CALIFORNIA	PROPERTY (GENERAL)	$200.00
			STRUCTURES	BATS (OTHER)	BUILDINGS, RESIDENTIAL	$810.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$300.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$5,270.00
				BEAVERS	ROADS/BRIDGES	$1,000.00
				OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$320.00
				RABBITS, COTTONTAIL	BUILDINGS, NON-RESIDENTIAL	$30.00
				RACCOONS	BUILDINGS, NON-RESIDENTIAL	$20.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$585.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$1,175.00
				SQUIRRELS, WESTERN GRAY	BUILDINGS, RESIDENTIAL	$70.00
		PROPERTY Total				$11,305.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$150.00
		PROPERTY Total				$150.00
2008 Total						**$20,335.00**
2009	**YUBA**	AGRICULTURE	**FIELD CROPS**	BEAVERS	GRAINS, RICE	$250.00
			LIVESTOCK	COYOTES	FOWL, CHICKENS (OTHER)	$145.00
				COYOTES	SHEEP (ADULT)	$3,240.00
				COYOTES	SHEEP (LAMBS)	$560.00
				FOXES, GRAY	FOWL, CHICKENS (OTHER)	$45.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, Z-(OTHER ADULTS)	$320.00
				LIONS, MOUNTAIN (COUGAR)	LLAMAS (ALL)	$2,000.00
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$500.00
				RACCOONS	FOWL, GEESE (DOMESTIC)	$400.00
				SKUNKS, STRIPED	FOWL, CHICKENS (OTHER)	$40.00
			OTHER	COYOTES	HIVES (BEES, HONEY, STRUCTURES)	$1,820.00
				SKUNKS, STRIPED	EGGS	$8.00
		AGRICULTURE Total				$9,328.00
		NATURAL RESOURCE	**OTHER NATURAL RESOURCES**	BEAVERS	STREAMS	$350.00
		NATURAL RESOURCE Total				$350.00
		PROPERTY	**ANIMAL**	RACCOONS	PETS (COMPANION/HOBBY ANIMALS)	$60.00
				SKUNKS, STRIPED	PETS (COMPANION/HOBBY ANIMALS)	$20.00
			LANDSCAPING, TURF AND GARDENS	BEAVERS	TREES, STANDING/SHRUBS	$20.00
				OPOSSUMS, VIRGINIA	TURF AND/OR FLOWERS	$10.00
				POCKET GOPHERS, BOTTA`S	Z-LANDSCAPING (OTHER)	$20.00
				RACCOONS	TURF AND/OR FLOWERS	$1,545.00
				SKUNKS, STRIPED	TURF AND/OR FLOWERS	$300.00
				SKUNKS, STRIPED	Z-LANDSCAPING (OTHER)	$40.00
			OTHER PROPERTY	BEAVERS	PROPERTY (GENERAL)	$300.00
				OPOSSUMS, VIRGINIA	PROPERTY (GENERAL)	$20.00
				SKUNKS, STRIPED	CLOTHING	$200.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$55.00
				SQUIRRELS, GROUND, CALIFORNIA	PROPERTY (GENERAL)	$70.00
			STRUCTURES	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$1,320.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$7,575.00
				BEAVERS	IRRIGATION PIPE SYSTEM	$50.00
				BEAVERS	ROADS/BRIDGES	$16,990.00
				MUSKRATS	IRRIGATION DITCH/DRAINAGE SYSTEM	$300.00
				OPOSSUMS, VIRGINIA	BUILDINGS, NON-RESIDENTIAL	$30.00

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018						
CALENDAR YEAR	**COUNTY**	**CATEGORY**	**SUBCATEGORY**	**SPECIES**	**RESOURCE**	**Sum of TOTALDAMAGESLOSS**
2009	**YUBA**	PROPERTY	**STRUCTURES**	OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$520.00
				RACCOONS	BUILDINGS, NON-RESIDENTIAL	$30.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$15.00
				RATS, BLACK (ROOF)	BUILDINGS, RESIDENTIAL	$100.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$800.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$950.00
		PROPERTY Total				$31,340.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$2,650.00
		PROPERTY Total				$2,650.00
2009 Total						**$43,668.00**
2010	**YUBA**	AGRICULTURE	**LIVESTOCK**	BEAVERS	GOATS, MEAT (ADULTS)	$150.00
				BOBCATS	FOWL, CHICKENS (OTHER)	$80.00
				COYOTES	CATTLE (CALVES)	$250.00
				COYOTES	GOATS, MEAT (ADULTS)	$75.00
				COYOTES	GOATS, MEAT (KIDS)	$70.00
				COYOTES	SHEEP (LAMBS)	$450.00
				DOGS, FERAL, FREE-RANGING AND HYBRIDS	GOATS, MEAT (ADULTS)	$400.00
				DOGS, FERAL, FREE-RANGING AND HYBRIDS	GOATS, MEAT (KIDS)	$200.00
				DOGS, FERAL, FREE-RANGING AND HYBRIDS	SHEEP (ADULT)	$300.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (ADULTS)	$1,350.00
				RACCOONS	FOWL, CHICKENS (OTHER)	$1,200.00
				RACCOONS	FOWL, TURKEYS (DOMESTIC)	$300.00
		AGRICULTURE Total				$4,825.00
		HEALTH AND SAFETY	**HUMAN HEALTH AND SAFETY**	SKUNKS, STRIPED	HLTH/SFTY, HUMAN Z-(GENERAL)	$100.00
		HEALTH AND SAFETY Total				$100.00
		NATURAL RESOURCE	**FORESTRY (NATRL. RESRC)**	BEAVERS	TREES, STANDING	$3,800.00
			OTHER NATURAL RESOURCES	BEAVERS	STREAMS	$8,170.00
				MUSKRATS	STREAMS	$7,000.00
		NATURAL RESOURCE Total				$18,970.00
		PROPERTY	**ANIMAL**	BOBCATS	PETS (COMPANION/HOBBY ANIMALS)	$1,400.00
				LIONS, MOUNTAIN (COUGAR)	PETS (COMPANION/HOBBY ANIMALS)	$1,800.00
			LANDSCAPING, TURF AND GARDENS	BEAVERS	TREES, STANDING/SHRUBS	$150.00
				RACCOONS	TURF AND/OR FLOWERS	$305.00
				SKUNKS, STRIPED	GARDENS, VEG./FRUITS/NUTS	$20.00
				SKUNKS, STRIPED	TURF AND/OR FLOWERS	$40.00
				SWINE, FERAL	TURF AND/OR FLOWERS	$5,950.00
				SWINE, FERAL	Z-LANDSCAPING (OTHER)	$3,550.00
				VOLES (OTHER)	TURF AND/OR FLOWERS	$20.00
			OTHER PROPERTY	BEARS, BLACK	PROPERTY (GENERAL)	$600.00
				BEAVERS	PROPERTY (GENERAL)	$400.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$10.00
			STRUCTURES	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$1,425.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$10,330.00
				BEAVERS	IRRIGATION PIPE SYSTEM	$750.00
				BEAVERS	ROADS/BRIDGES	$3,180.00
				BEAVERS	UTILITIES, ELECTRICAL	$1,000.00
				COYOTES	IRRIGATION PIPE SYSTEM	$300.00
				MUSKRATS	DIKES/DAMS/IMPOUNDMENTS	$170.00
				MUSKRATS	IRRIGATION DITCH/DRAINAGE SYSTEM	$600.00
				MUSKRATS	ROADS/BRIDGES	$3,000.00
				OPOSSUMS, VIRGINIA	BUILDINGS, NON-RESIDENTIAL	$40.00
				RACCOONS	BUILDINGS, NON-RESIDENTIAL	$35.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$2,002.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$295.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$630.00
				SWINE, FERAL	IRRIGATION PIPE SYSTEM	$3,800.00
		PROPERTY Total				$41,802.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$500.00

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018

CALENDAR YEAR	COUNTY	CATEGORY	SUBCATEGORY	SPECIES	RESOURCE	Sum of TOTALDAMAGESLOSS
2010	YUBA MISC. COUNTY PROJECTS	PROPERTY Total				$500.00
2010 Total						$66,197.00
2011	YUBA	AGRICULTURE	FIELD CROPS	FOXES, GRAY	GARDENS, TRUCK	$60.00
				RACCOONS	GARDENS, TRUCK	$45.00
			LIVESTOCK	BEARS, BLACK	FOWL, CHICKENS (OTHER)	$200.00
				BEARS, BLACK	GOATS, MEAT (ADULTS)	$140.00
				COYOTES	FOWL, CHICKENS (OTHER)	$250.00
				COYOTES	FOWL, TURKEYS (DOMESTIC)	$200.00
				COYOTES	GOATS, Z-(OTHER ADULTS)	$85.00
				COYOTES	SHEEP (ADULT)	$300.00
				DOGS, FERAL, FREE-RANGING AND HYBRIDS	SWINE (ADULT)	$180.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (KIDS)	$180.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, Z-(OTHER ADULTS)	$120.00
				RACCOONS	FOWL, CHICKENS (OTHER)	$250.00
		AGRICULTURE Total				$2,010.00
		NATURAL RESOURCE	FORESTRY (NATRL. RESRC)	BEAVERS	TREES, STANDING	$1,750.00
			OTHER NATURAL RESOURCES	BEAVERS	STREAMS	$12,940.00
		NATURAL RESOURCE Total				$14,690.00
		PROPERTY	LANDSCAPING, TURF AND GARDENS	CATS, FERAL/FREE RANGING	TURF AND/OR FLOWERS	$30.00
				DOGS, FERAL, FREE-RANGING AND HYBRIDS	TURF AND/OR FLOWERS	$200.00
				OPOSSUMS, VIRGINIA	TURF AND/OR FLOWERS	$10.00
				SKUNKS, STRIPED	TURF AND/OR FLOWERS	$80.00
				SWINE, FERAL	TURF AND/OR FLOWERS	$450.00
			OTHER PROPERTY	SWINE, FERAL	PROPERTY (GENERAL)	$1,050.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$100.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$540.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$3,985.00
				BEAVERS	UTILITIES, ELECTRICAL	$605.00
				FOXES, GRAY	BUILDINGS, NON-RESIDENTIAL	$40.00
				OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$35.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$100.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$700.00
		PROPERTY Total				$7,925.00
	YUBA MISC. COUNTY PROJECTS	NATURAL RESOURCE	OTHER NATURAL RESOURCES	BEAVERS	STREAMS	$250.00
		NATURAL RESOURCE Total				$250.00
		PROPERTY	STRUCTURES	BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$1,735.00
		PROPERTY Total				$1,735.00
2011 Total						$26,610.00
2012	YUBA	AGRICULTURE	LIVESTOCK	BOBCATS	FOWL, CHICKENS (OTHER)	$28.20
				LIONS, MOUNTAIN (COUGAR)	SHEEP (LAMBS)	$19,500.00
		AGRICULTURE Total				$19,528.20
		NATURAL RESOURCE	FORESTRY (NATRL. RESRC)	BEAVERS	TREES, STANDING	$1,000.00
		NATURAL RESOURCE Total				$1,000.00
		PROPERTY	OTHER PROPERTY	RACCOONS	PROPERTY (GENERAL)	$1,200.00
			STRUCTURES	BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$250.00
		PROPERTY Total				$1,450.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	STRUCTURES	BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$30,000.00
		PROPERTY Total				$30,000.00
2012 Total						$51,978.20
2013	YUBA	AGRICULTURE	FIELD CROPS	BEAVERS	GRAINS, RICE	$5,191.90
			LIVESTOCK	BEARS, BLACK	FOWL, CHICKENS (OTHER)	$747.00
				COYOTES	GOATS, MEAT (ADULTS)	$928.16
				COYOTES	SHEEP (ADULT)	$1,381.91
				COYOTES	SHEEP (LAMBS)	$251.16
				FOXES, GRAY	FOWL, CHICKENS (OTHER)	$522.90
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (ADULTS)	$3,819.16
				LIONS, MOUNTAIN (COUGAR)	GOATS, Z-(OTHER ADULTS)	$2,742.75
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$127.67

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018						
CALENDAR YEAR	**COUNTY**	**CATEGORY**	**SUBCATEGORY**	**SPECIES**	**RESOURCE**	**Sum of TOTALDAMAGESLOSS**
2013	**YUBA**	AGRICULTURE	**LIVESTOCK**	RACCOONS	FOWL, CHICKENS (OTHER)	$592.00
				SKUNKS, STRIPED	FOWL, CHICKENS (OTHER)	$398.40
		AGRICULTURE Total				$16,703.01
		NATURAL RESOURCE	**FORESTRY (NATRL. RESRC)**	BEAVERS	TREES, SEEDLINGS NR	$2,500.00
		NATURAL RESOURCE Total				$2,500.00
		PROPERTY	**OTHER PROPERTY**	BEARS, BLACK	PROPERTY (GENERAL)	$700.00
				BEAVERS	PROPERTY (GENERAL)	$2,350.00
				COYOTES	PROPERTY (GENERAL)	$1,450.00
				OPOSSUMS, VIRGINIA	PROPERTY (GENERAL)	$1,100.00
				RACCOONS	PROPERTY (GENERAL)	$4,225.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$8,875.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$1,900.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$7,500.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$45,850.00
				BEAVERS	IRRIGATION PIPE SYSTEM	$12,000.00
				BEAVERS	ROADS/BRIDGES	$1,500.00
		PROPERTY Total				$87,450.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$500.00
		PROPERTY Total				$500.00
2013 Total						**$107,153.01**
2014	**YUBA**	AGRICULTURE	**FIELD CROPS**	BEAVERS	GRAINS, RICE	$2,700.00
			LIVESTOCK	BEARS, BLACK	FOWL, CHICKENS (OTHER)	$348.60
				BEARS, BLACK	FOWL, TURKEYS (DOMESTIC)	$200.00
				BEARS, BLACK	GOATS, MEAT (ADULTS)	$1,624.28
				BEARS, BLACK	SWINE (ADULT)	$408.70
				COYOTES	CATTLE CALVES (BEEF)	$405.63
				COYOTES	GOATS, MEAT (ADULTS)	$116.02
				COYOTES	GOATS, MEAT (KIDS)	$210.24
				COYOTES	SHEEP (ADULT)	$3,332.03
				COYOTES	SHEEP (LAMBS)	$416.02
				RACCOONS	FOWL, CHICKENS (OTHER)	$14.90
				SKUNKS, STRIPED	FOWL, CHICKENS (OTHER)	$2,928.00
				SKUNKS, STRIPED	FOWL, DUCKS (DOMESTIC)	$73.50
			OTHER	BEARS, BLACK	HIVES (BEES, HONEY, STRUCTURES)	$7,236.81
		AGRICULTURE Total				$20,014.73
		HEALTH AND SAFETY	**HUMAN HEALTH AND SAFETY**	SKUNKS, STRIPED	HLTH/SFTY, HUMAN Z-(GENERAL)	$125.00
		HEALTH AND SAFETY Total				$125.00
		PROPERTY	**ANIMAL**	COYOTES	PETS (COMPANION/HOBBY ANIMALS)	$750.00
				LIONS, MOUNTAIN (COUGAR)	PETS (COMPANION/HOBBY ANIMALS)	$3,400.00
				RACCOONS	PETS (COMPANION/HOBBY ANIMALS)	$3,500.00
			LANDSCAPING, TURF AND GARDENS	BEAVERS	TREES, STANDING/SHRUBS	$1,500.00
			OTHER PROPERTY	BEARS, BLACK	PROPERTY (GENERAL)	$4,150.00
				BEAVERS	PROPERTY (GENERAL)	$5,350.00
				OPOSSUMS, VIRGINIA	PROPERTY (GENERAL)	$450.00
				RACCOONS	PROPERTY (GENERAL)	$1,150.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$5,525.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$1,500.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$9,200.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$11,250.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$250.00
				SKUNKS, STRIPED	ROADS/BRIDGES	$900.00
		PROPERTY Total				$48,875.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$11,200.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$1,500.00
		PROPERTY Total				$12,700.00
2014 Total						**$81,714.73**
2015	**YUBA**	AGRICULTURE	**LIVESTOCK**	BEARS, BLACK	FOWL, CHICKENS (OTHER)	$111.75
				BEARS, BLACK	SWINE (ADULT)	$800.00

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018

CALENDAR YEAR	COUNTY	CATEGORY	SUBCATEGORY	SPECIES	RESOURCE	Sum of TOTALDAMAGESLOSS
2015	YUBA	AGRICULTURE	LIVESTOCK	COYOTES	CATTLE CALVES (BEEF)	$2,828.15
				COYOTES	GOATS, MEAT (KIDS)	$330.81
				COYOTES	SHEEP (ADULT)	$1,681.37
				COYOTES	SHEEP (LAMBS)	$248.58
				LIONS, MOUNTAIN (COUGAR)	CATTLE CALVES (BEEF)	$3,245.04
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (ADULTS)	$366.93
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$2,650.00
				RACCOONS	FOWL, CHICKENS (OTHER)	$224.50
				RACCOONS	FOWL, DUCKS (DOMESTIC)	$147.00
				SKUNKS, STRIPED	FOWL, CHICKENS (OTHER)	$29.80
				SKUNKS, STRIPED	FOWL, DUCKS (DOMESTIC)	$122.50
		AGRICULTURE Total				$12,786.43
		PROPERTY	ANIMAL	COYOTES	PETS (COMPANION/HOBBY ANIMALS)	$2,000.00
			LANDSCAPING, TURF AND GARDENS	BEAVERS	TREES, STANDING/SHRUBS	$8,000.00
			OTHER PROPERTY	BEARS, BLACK	PROPERTY (GENERAL)	$2,500.00
				OPOSSUMS, VIRGINIA	PROPERTY (GENERAL)	$100.00
				RACCOONS	PROPERTY (GENERAL)	$800.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$1,500.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$3,350.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$38,100.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$1,250.00
				SKUNKS, SPOTTED	BUILDINGS, NON-RESIDENTIAL	$100.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$9,000.00
		PROPERTY Total				$66,700.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	STRUCTURES	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$14,500.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$2,000.00
		PROPERTY Total				$16,500.00
2015 Total						**$95,986.43**
2016	YUBA	AGRICULTURE	FIELD CROPS	BEAVERS	GRAINS, RICE	$3,000.00
			LIVESTOCK	BEARS, BLACK	CATTLE CALVES (BEEF)	$800.00
				BEARS, BLACK	GOATS, MEAT (ADULTS)	$1,259.10
				BEARS, BLACK	LLAMAS (ALL)	$3,000.00
				BEARS, BLACK	SHEEP (ADULT)	$746.41
				COYOTES	SHEEP (ADULT)	$812.74
				COYOTES	SHEEP (LAMBS)	$357.42
				DOGS, FERAL, FREE-RANGING AND HYBRIDS	CATTLE CALVES (BEEF)	$2,028.15
				LIONS, MOUNTAIN (COUGAR)	CATTLE CALVES (BEEF)	$2,000.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (ADULTS)	$2,014.56
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$3,125.96
				RACCOONS	FOWL, CHICKENS (OTHER)	$48.37
				RACCOONS	FOWL, DUCKS (DOMESTIC)	$1,083.20
		AGRICULTURE Total				$20,275.91
		PROPERTY	ANIMAL	COYOTES	PETS (COMPANION/HOBBY ANIMALS)	$1,500.00
			OTHER PROPERTY	SKUNKS, STRIPED	PROPERTY (GENERAL)	$3,750.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, RESIDENTIAL	$3,000.00
				BEAVERS	BUILDINGS, NON-RESIDENTIAL	$5,000.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$3,000.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$19,000.00
				BEAVERS	ROADS/BRIDGES	$18,000.00
				OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$500.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$850.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$500.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$20,200.00
		PROPERTY Total				$75,300.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	STRUCTURES	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$1,500.00
		PROPERTY Total				$1,500.00
2016 Total						**$97,075.91**
2017	YUBA	AGRICULTURE	FIELD CROPS	BEAVERS	GRAINS, RICE	$7,471.10

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018

CALENDAR YEAR	COUNTY	CATEGORY	SUBCATEGORY	SPECIES	RESOURCE	Sum of TOTALDAMAGESLOSS
2017	**YUBA**	AGRICULTURE	**LIVESTOCK**	BEARS, BLACK	FOWL, CHICKENS (OTHER)	$2,550.00
				BEARS, BLACK	FOWL, DUCKS (DOMESTIC)	$1,016.74
				BEARS, BLACK	FOWL, TURKEYS (DOMESTIC)	$101.84
				BEARS, BLACK	GOATS, MEAT (ADULTS)	$1,236.78
				COYOTES	CATTLE ADULT (BEEF)	$250.00
				COYOTES	FOWL, CHICKENS (OTHER)	$436.30
				COYOTES	SHEEP (ADULT)	$4,100.00
				COYOTES	SHEEP (LAMBS)	$425.04
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (ADULTS)	$2,383.50
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$1,650.00
				OPOSSUMS, VIRGINIA	FOWL, CHICKENS (OTHER)	$41.88
				RACCOONS	FOWL, CHICKENS (OTHER)	$419.82
				RACCOONS	FOWL, DUCKS (DOMESTIC)	$250.18
				SKUNKS, STRIPED	FOWL, CHICKENS (OTHER)	$20.94
				SNAKES, NON-VENOMOUS (OTHER)	RABBITS (DOMESTIC)	$105.42
		AGRICULTURE Total				$22,459.54
		PROPERTY	**OTHER PROPERTY**	SKUNKS, STRIPED	PROPERTY (GENERAL)	$4,300.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$2,500.00
				BEARS, BLACK	BUILDINGS, RESIDENTIAL	$9,700.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$34,500.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$31,500.00
				BEAVERS	ROADS/BRIDGES	$4,500.00
				OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$200.00
				RACCOONS	BUILDINGS, NON-RESIDENTIAL	$400.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$2,360.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$1,750.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$10,250.00
		PROPERTY Total				$101,960.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$1,200.00
		PROPERTY Total				$1,200.00
2017 Total						**$125,619.54**
2018	**YUBA**	AGRICULTURE	**LIVESTOCK**	BEARS, BLACK	FOWL, DUCKS (DOMESTIC)	$1,500.00
				BEARS, BLACK	GOATS, MEAT (ADULTS)	$500.00
				BOBCATS	GOATS, MEAT (ADULTS)	$500.00
				COYOTES	CATTLE CALVES (BEEF)	$884.50
				COYOTES	FOWL, CHICKENS (OTHER)	$300.00
				COYOTES	GOATS, MEAT (ADULTS)	$750.00
				COYOTES	GOATS, Z-(OTHER ADULTS)	$11,608.80
				COYOTES	SHEEP (ADULT)	$1,400.00
				COYOTES	SHEEP (LAMBS)	$950.00
				FOXES, GRAY	FOWL, CHICKENS (OTHER)	$1,000.00
				LIONS, MOUNTAIN (COUGAR)	EQUINE, DONKEYS/BURROS	$5,000.00
				LIONS, MOUNTAIN (COUGAR)	GOATS, MEAT (ADULTS)	$9,653.48
				LIONS, MOUNTAIN (COUGAR)	SHEEP (ADULT)	$2,600.00
				RACCOONS	FOWL, CHICKENS (OTHER)	$436.66
				RACCOONS	FOWL, DUCKS (DOMESTIC)	$464.95
				SKUNKS, STRIPED	CATTLE ADULT (BEEF)	$300.00
				SKUNKS, STRIPED	FOWL, CHICKENS (OTHER)	$600.00
		AGRICULTURE Total				$38,448.39
		HEALTH AND SAFETY	**HUMAN HEALTH AND SAFETY**	SKUNKS, STRIPED	HLTH/SFTY, HUMAN Z-(GENERAL)	$500.00
		HEALTH AND SAFETY Total				$500.00
		PROPERTY	**ANIMAL**	FOXES, GRAY	PETS (COMPANION/HOBBY ANIMALS)	$300.00
			OTHER PROPERTY	FOXES, GRAY	PROPERTY (GENERAL)	$500.00
				SKUNKS, STRIPED	PROPERTY (GENERAL)	$300.00
			STRUCTURES	BEARS, BLACK	BUILDINGS, NON-RESIDENTIAL	$500.00
				BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$5,000.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$73,700.00
				BEAVERS	ROADS/BRIDGES	$15,000.00
				MUSKRATS	DIKES/DAMS/IMPOUNDMENTS	$900.00

Table B-2: Yuba Confirmed Damage Mammal Species 2007-2018						
CALENDAR YEAR	**COUNTY**	**CATEGORY**	**SUBCATEGORY**	**SPECIES**	**RESOURCE**	**Sum of TOTALDAMAGESLOSS**
2018	**YUBA**	PROPERTY	**STRUCTURES**	OPOSSUMS, VIRGINIA	BUILDINGS, NON-RESIDENTIAL	$400.00
				OPOSSUMS, VIRGINIA	BUILDINGS, RESIDENTIAL	$900.00
				RACCOONS	BUILDINGS, NON-RESIDENTIAL	$350.00
				RACCOONS	BUILDINGS, RESIDENTIAL	$900.00
				SKUNKS, STRIPED	BUILDINGS, NON-RESIDENTIAL	$300.00
				SKUNKS, STRIPED	BUILDINGS, RESIDENTIAL	$16,700.00
		PROPERTY Total				$115,750.00
	YUBA MISC. COUNTY PROJECTS	PROPERTY	**STRUCTURES**	BEAVERS	DIKES/DAMS/IMPOUNDMENTS	$14,500.00
				BEAVERS	IRRIGATION DITCH/DRAINAGE SYSTEM	$11,000.00
		PROPERTY Total				$25,500.00
2018 Total						**$180,198.39**
Grand Total						**$926,856.21**

Source: USDA APHIS-WS Management Information System (USDA 2019b)

Table B-3: Confirmed Damage Caused by Avian Species 2007-2018

COUNTY	CALENDAR YEAR	CATEGORY	SUBCATEGORY	SPECIES	RESOURCE	LOSS_DMGT_NAME	Sum of TOTALDAMAGESLOSS
YUBA	2007	AGRICULTURE	LIVESTOCK	PIGEONS, FERAL (ROCK)	CATTLE (ADULT)	FATALITY	$6,000.00
			OTHER	STARLINGS, EUROPEAN	FEED, LIVESTOCK	FEEDING (OTHER)	$1,000.00
			OTHER	STARLINGS, EUROPEAN	SILAGE	CONSUMPTION/CONTAMINATION	$1,750.00
		AGRICULTURE Total					$8,750.00
		PROPERTY	STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$3,985.00
			STRUCTURES	STARLINGS, EUROPEAN	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$300.00
		PROPERTY Total					$4,285.00
	2007 Total						**$13,035.00**
	2008	AGRICULTURE	OTHER	BLACKBIRDS, BREWER`S	SILAGE	FEEDING (OTHER)	$500.00
			OTHER	COWBIRDS, BROWN-HEADED	SILAGE	FEEDING (OTHER)	$50.00
			OTHER	STARLINGS, EUROPEAN	SILAGE	DROPPINGS	$100.00
			OTHER	STARLINGS, EUROPEAN	SILAGE	FEEDING (OTHER)	$200.00
		AGRICULTURE Total					$850.00
		PROPERTY	STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DAMAGE	$550.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$4,250.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, RESIDENTIAL	DROPPINGS	$2,030.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	UTILITIES, ELECTRICAL	DROPPINGS	$6,000.00
			STRUCTURES	STARLINGS, EUROPEAN	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$50.00
		PROPERTY Total					$12,880.00
	2008 Total						**$13,730.00**
	2009	AGRICULTURE	FIELD CROPS	GEESE, CANADA	GRAINS, RICE	FEEDING (OTHER)	$45.00
		AGRICULTURE Total					$45.00
		PROPERTY	STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$1,745.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, RESIDENTIAL	DROPPINGS	$100.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	UTILITIES, ELECTRICAL	DROPPINGS	$400.00
		PROPERTY Total					$2,245.00
	2009 Total						**$2,290.00**
	2010	AGRICULTURE	FIELD CROPS	BLACKBIRDS, RED-WINGED	GRAINS, CORN (FIELD)	FEEDING (OTHER)	$15.00
			FIELD CROPS	PIGEONS, FERAL (ROCK)	GRAINS, CORN (FIELD)	FEEDING (OTHER)	$200.00
			FIELD CROPS	STARLINGS, EUROPEAN	GRAINS, CORN (FIELD)	FEEDING (OTHER)	$15.00
			OTHER	BLACKBIRDS, BREWER`S	FEED, LIVESTOCK	FEEDING (OTHER)	$15.00
		AGRICULTURE Total					$245.00
		PROPERTY	EQUIPMENT	PIGEONS, FERAL (ROCK)	EQUIPMENT/MACHINERY (OTHER)	DROPPINGS	$5,000.00
			STRUCTURES	OWLS, COMMON BARN	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$450.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$20,710.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, RESIDENTIAL	DAMAGE	$210.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, RESIDENTIAL	DROPPINGS	$180.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	UTILITIES, ELECTRICAL	DROPPINGS	$300.00
			STRUCTURES	STARLINGS, EUROPEAN	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$155.00
			STRUCTURES	STARLINGS, EUROPEAN	BUILDINGS, RESIDENTIAL	DAMAGE	$100.00
			STRUCTURES	STARLINGS, EUROPEAN	BUILDINGS, RESIDENTIAL	DROPPINGS	$60.00
		PROPERTY Total					$27,165.00
	2010 Total						**$27,410.00**
	2011	AGRICULTURE	OTHER	PIGEONS, FERAL (ROCK)	FEED, LIVESTOCK	DROPPINGS	$250.00
		AGRICULTURE Total					$250.00
		PROPERTY	STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$830.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	UTILITIES, ELECTRICAL	DROPPINGS	$100.00
		PROPERTY Total					$930.00
	2011 Total						**$1,180.00**
	2013	AGRICULTURE	FIELD CROPS	GEESE, WHITE-FRONTED, GREATER	GRAINS, RICE	FEEDING (OTHER)	$2,500.00
		AGRICULTURE Total					$2,500.00
		PROPERTY	OTHER PROPERTY	PIGEONS, FERAL (ROCK)	PROPERTY (GENERAL)	DROPPINGS	$6,500.00
		PROPERTY Total					$6,500.00
	2013 Total						**$9,000.00**
	2014	PROPERTY	STRUCTURES	PIGEONS, FERAL (ROCK)	BUILDINGS, NON-RESIDENTIAL	DROPPINGS	$4,000.00
		PROPERTY Total					$4,000.00
	2014 Total						**$4,000.00**
	2015	AGRICULTURE	FIELD CROPS	COOTS, AMERICAN	GRAINS, RICE	CONSUMPTION/CONTAMINATION	$177,720.00
			FIELD CROPS	GEESE, WHITE-FRONTED, GREATER	HAYFIELDS, MIXED SPECIES	CONSUMPTION/CONTAMINATION	$1,142.55

Table B-3: Confirmed Damage Caused by Avian Species 2007-2018							
COUNTY	**CALENDAR YEAR**	**CATEGORY**	**SUBCATEGORY**	**SPECIES**	**RESOURCE**	**LOSS_DMGT_NAME**	**Sum of TOTALDAMAGESLOSS**
YUBA	**2015**	AGRICULTURE	**LIVESTOCK**	BLACKBIRDS, BREWER`S	**CATTLE ADULT (BEEF)**	INJURY	$5,954.76
			LIVESTOCK	BLACKBIRDS, RED-WINGED	**CATTLE ADULT (BEEF)**	INJURY	$20,841.66
		AGRICULTURE Total					$205,658.97
	2015 Total						**$205,658.97**
	2016	AGRICULTURE	**FIELD CROPS**	BLACKBIRDS, RED-WINGED	**HAYFIELDS, MIXED SPECIES**	FEEDING (OTHER)	$1,500.00
			FIELD CROPS	GEESE, WHITE-FRONTED, GREATER	**HAYFIELDS, MIXED SPECIES**	CONSUMPTION/CONTAMINATION	$2,278.75
		AGRICULTURE Total					$3,778.75
		PROPERTY	**STRUCTURES**	PIGEONS, FERAL (ROCK)	**BUILDINGS, NON-RESIDENTIAL**	DAMAGE	$3,000.00
		PROPERTY Total					$3,000.00
	2016 Total						**$6,778.75**
	2017	AGRICULTURE	**FIELD CROPS**	BLACKBIRDS, RED-WINGED	**HAYFIELDS, MIXED SPECIES**	CONSUMPTION/CONTAMINATION	$353.41
		AGRICULTURE Total					$353.41
		PROPERTY	**STRUCTURES**	PIGEONS, FERAL (ROCK)	**BUILDINGS, NON-RESIDENTIAL**	DROPPINGS	$500.00
			STRUCTURES	PIGEONS, FERAL (ROCK)	**BUILDINGS, RESIDENTIAL**	DROPPINGS	$5,000.00
		PROPERTY Total					$5,500.00
	2017 Total						**$5,853.41**
	2018	AGRICULTURE	**FIELD CROPS**	GEESE, WHITE-FRONTED, GREATER	**HAYFIELDS, MIXED SPECIES**	CONSUMPTION/CONTAMINATION	$2,827.28
		AGRICULTURE Total					$2,827.28
	2018 Total						**$2,827.28**
YUBA Total							**$291,763.41**
Grand Total							**$291,763.41**

Source: USDA APHIS-WS Management Information System (USDA 2019b)

Integrated Wildlife Damage Management
Control Methods

NONLETHAL CONTROL METHODS

APHIS-WS may recommend nonlethal control methods to resource owners. Those methods, descriptions, and their associated limitations are presented below and are summarized from USDA (2015a: Appendix C [Wildlife Damage Management Methods Available for Use in California]). Some nonlethal methods are appropriate and may be safely used by resource owners (e.g., animal husbandry practices, exclusion [fencing/penning], and frightening devices (e.g., lights)). However, some methods must be used only by trained professionals (e.g., pyrotechnics) because some nonlethal methods have the potential to result in unintentional effects on species that are protected by federal and/or state law. The types of nonlethal methods that have been used in Yuba County from 1998 to 2018 are shown in tables included at the end of this section. As with lethal methods, Yuba County would not be responsible for determining the nonlethal methods to be used.

RESOURCE MANAGEMENT

Resource management includes a variety of practices that may be used by agriculture producers to reduce their exposure to potential wildlife depredation losses. Implementation of these practices is appropriate when the potential for depredation can be reduced without significantly increasing the cost of production or diminishing the resource owner's ability to achieve land management and production goals. Changes in resource management are recommended through the technical assistance extended to producers when the change appears to present a continuing means of averting losses.

ANIMAL HUSBANDRY

This general category includes modifications in the level of care and attention given to livestock, shifts in the timing of breeding and births, selection of less vulnerable livestock species to be produced, and the introduction of human custodians or guarding animals to protect livestock.

The level of care or attention given to livestock may range from daily to seasonal. Generally, as the frequency and intensity of livestock handling increases, so does the degree of protection. In operations where livestock are left unattended for extended periods, the risk of depredation is greatest. The risk of depredation can be reduced when operations permit nightly gathering so that livestock are inaccessible during the hours when predators are most active. This risk diminishes as age and size increase and can be minimized by holding expectant females in pens or sheds to protect births and by holding newborn livestock in pens for the first two weeks. Shifts in breeding schedules can also reduce the risk of depredation by altering the timing of births to coincide with the greatest availability of natural prey to predators or to avoid seasonal concentrations of migrating predators such as golden eagles.

The use of human custodians and guarding animals can also provide significant protection in some instances. The presence of herders to accompany bands of sheep on an open range may help ward off predators. Guard dogs have also proven successful in many sheep and goat operations. The supply of proven guarding dogs is generally quite limited, requiring that most people purchase and rear a pup. Therefore, there is usually a four- to eight-month period of time necessary to raise a guarding dog before it becomes an effective deterrent to predators. Because 25 to 30 percent of dogs are not successful, there is a reasonable chance that the first dog raised as a protector will not be useful. The effectiveness of guarding dogs may not be sufficient in areas where there is a high density of predators, where livestock widely scatter to forage, or where dog-

to-livestock ratios are less than recommended. Guarding dogs often harass and kill nontarget wildlife.

Altering animal husbandry to reduce wildlife damage has many limitations. Nightly gathering may not be possible where livestock are in many fenced pastures and where grazing conditions require livestock to scatter. Hiring extra herders, building secure holding pens, and adjusting the timing of births is usually expensive. Furthermore, the timing of births may be related to weather or seasonal marketing of young livestock. The expense associated with a change in husbandry practice may exceed the savings.

HABITAT MANAGEMENT

Some habitat can be managed to not produce or attract certain wildlife species. For example, when depredation cannot be avoided by careful crop selection or modified planting schedules, lure crops can sometimes be used to mitigate the loss potential. Lure crops are planted or left for consumption by wildlife as an alternative food source. This approach provides relief for critical crops by sacrificing less important or specifically planted fields. For lure crops to be successful, frightening techniques may be necessary in fields where crops are to be protected; wildlife should not be disturbed in sacrificial fields.

Limitations of habitat management as a method of reducing wildlife damage are determined by the characteristics of the species involved, the nature of the damage, economic feasibility, and other factors. Also, legal constraints may preclude altering particular habitats, particularly those that support threatened and endangered species, California species of special concern, critical habitat, or rare plants.

Establishing lure crops is expensive, requires considerable time and planning to implement, and may attract other unwanted species to the area, causing additional wildlife damage problems. Also, there are potential legal consequences regarding hunting near lure crops, which must be considered before lure crops or alternate foods are used.

URBAN DESIGN

Change in the architectural design of a building or a public space can often help to avoid potential wildlife damage. For example, selecting species of trees and shrubs that are not attractive to wildlife can reduce the likelihood of potential wildlife damage to parks, public spaces, or residential areas. Similarly, incorporating devices into architectural design that exclude wildlife can significantly reduce potential problems. Grids or screens that prevent birds from entering are an example.

Architectural changes are often more feasible if considered during the design stage, rather than after a facility is built. The consideration of wildlife conflicts is frequently overlooked in the construction of new buildings and facilities. Modifying structures or public spaces to remove the potential for wildlife conflicts is often impractical because of economics or the presence of other nearby habitat features that attract wildlife.

PHYSICAL EXCLUSION

Physical exclusion methods restrict the access of wildlife to resources. These methods, including fences, sheathing, tree protectors, and entrance barricades, provide a means of appropriate and effective prevention of wildlife damage in many situations.

Fences are widely used to prevent damage to farm crops caused by rabbits and other wildlife. Predator exclusion fences constructed of woven wire or multiple strands of electrified wire are also effective in some areas, but fencing does have limitations. Even an electrified fence is not predator proof and the expense may exceed the benefit in most cases. Herd animals such as sheep may be protected through fencing/penning, as has been demonstrated in Marin County.

If large areas are fenced, the predators have to be removed from the enclosed area to make it useful. Some fences inadvertently trap, catch, or affect the movement of nontarget wildlife. It is not uncommon for coyotes to use fences to trap deer or antelope. As such, fencing large areas could result in unintended consequences on wildlife migratory corridors. Fencing may not be practical or legal in some areas (e.g., restricting access to public land). Predators deterred by fencing may move to another area where they could create new problems or exacerbate an existing one (i.e., predation would not necessarily be controlled, just relocated).

Entrance barricades of various kinds are used to exclude bobcats, coyotes, foxes, opossums, raccoons, or skunks from dwellings, storage areas, gardens, or other areas. Metal flashing may be used to prevent entry of small rodents into buildings.

Sheathing or tree protectors can be used in some situations to avoid damage to trees but may be impractical where there are numerous plants to protect.

DETERRENTS

Deterrents may effectively alter the behavior of the target animal to eliminate or reduce the potential for loss or damage to property. Most deterrent methods are used for birds. An important consideration for deterrent use is safety; some methods should be used only by trained professionals. In addition, some methods have a potential to affect nesting avian species.

Frightening Devices

The success of frightening methods depends on an animal's fear of and subsequent aversion to offensive stimuli. Once animals become habituated to a stimulus, they often resume their damaging activities. Persistent effort is usually required to consistently apply frightening techniques and then vary them sufficiently to prolong their effectiveness. Over time, some animals learn to ignore commonly used scare tactics. In many cases, animals frightened from one location become a problem at another. The effects of frightening devices on nontarget wildlife need to be considered. For example, special-status birds or birds protected under the Migratory Bird Treaty Act (MBTA) may be disturbed or frightened from nesting sites.

Electronic Distress Sounds

Distress and alarm calls of various animals have been used singly and in conjunction with other scaring devices to successfully scare or harass animals. Many of these sounds are available in digital format. Animals react differently to distress calls; their use depends on the species and the problem. Calls may be played for short (few seconds) bursts, for longer periods, or even continually, depending on the severity of damage and relative effectiveness of different treatment or "playing" times. Some artificially created sounds also repel birds in the same manner as recorded "natural" distress calls. Calls are played back to the animals from either fixed or mobile equipment in the immediate or surrounding area of the problem.

Propane Exploders

Propane exploders operate on propane gas and are designed to produce loud explosions at controllable intervals. They are strategically located (elevated above the vegetation, if possible) in areas of high wildlife use to frighten wildlife from the problem site. Because animals are known to habituate to sounds, exploders must be moved frequently and used in conjunction with other scare devices. Exploders can be left in an area after dispersal is complete to discourage animals from returning. Similar to frightening devices, the effects of propane exploders on nontarget wildlife need to be considered. For example, special-status birds or birds protected under the MBTA may be disturbed or frightened from nesting sites. These types of devices have not been used in Yuba County.

Pyrotechnics

Pyrotechnic devices, such as shell crackers or scare cartridges fired from a shotgun, noise bombs, whistle bombs, racket bombs, rocket bombs fired from a flare pistol, firecrackers, rockets, and Roman candles, are used for dispersing animals. These methods are primarily used to disperse birds in crop fields. As with frightening devices and propane exploders, the effects of pyrotechnics on nontarget wildlife need to be considered. For example, special-status birds or birds protected under the MBTA may be disturbed or frightened from nesting sites.

Lights

A variety of lights, including strobe, barricade, and revolving units, can be used with mixed results to frighten birds. Brilliant lights, similar to those used on aircraft, are most effective in frightening night-feeding birds. These extremely bright-flashing lights have a blinding effect. Flashing amber barricade lights, like those used at construction sites, and revolving or moving lights may also frighten birds. However, most birds rapidly become accustomed to such lights and their long-term effectiveness is questionable. In general, the type of light, the number of units, and their location are determined by the size of the area to be protected and by the power source available. In addition, the use of strobe lights or flashing lights in the vicinity of Beale Air Force Base is regulated by policies in the Beale Air Force Base Land Use Compatibility Plan and Federal Aviation Administration regulations.

Harassment

Scaring and harassment techniques to frighten animals are probably the oldest methods of combating wildlife damage. A number of sophisticated techniques have been developed to scare or harass wildlife from an area. The use of noise-making devices is the most popular and commonly used; however, other methods, including aerial hazing and visual stimuli, are also used. Harassment using vehicles, people, falcons, or dogs is used to frighten predators or birds from the immediate vicinity. Boats, planes, automobiles, and all-terrain vehicles are used as harassment methods. As with other wildlife damage management efforts, these techniques tend to be more effective when used collectively in a varied regime rather than individually.

Chemical Repellents

Chemical repellents are compounds that prevent consumption of food items or use of an area. They operate by producing an undesirable taste, odor, feel, or behavior pattern. Effective and practical chemical repellents need to be nonhazardous to wildlife; nontoxic to plants, seeds, and humans; resistant to weathering; easily applied; reasonably priced; and capable of providing

good repelling qualities. The reaction of different animals to a single chemical formulation varies, and for any species there may be variations in repellency between different habitat types. Chemical repellents are strictly regulated, and suitable repellents are not available for many wildlife species or wildlife damage situations.

MODIFICATION OF HUMAN BEHAVIOR

Many wildlife species adapt well to human settlements and activities, but their proximity to humans may result in damage to structures or threats to public health and safety. APHIS-WS wildlife specialists may recommend alteration of human behavior to resolve potential conflicts between humans and wildlife. For example, APHIS-WS may recommend the elimination of feeding of wildlife that occurs in residential areas. Eliminating wildlife feeding and handling can reduce potential problems, but many people who are not directly affected by problems caused by wildlife enjoy wild animals and engage in activities that encourage their presence. It is difficult to consistently enforce no-feeding regulations and effectively educate all people concerning the potential liabilities of feeding wildlife.

DIRECT CONTROL METHODS

The lethal control of animals by APHIS-WS is authorized under APHIS-WS Directive 2.505 (USDA 2011). A variety of methods for removing a target animal species are available in California. Those methods and their descriptions are presented below and are summarized from USDA (2015a: Appendix C [Wildlife Damage Management Methods Available for Use in California]). These descriptions are provided for disclosure purposes. Yuba County would not be responsible for determining the methods to be used. The lethal methods that have been used in Yuba County from 1998 to 2017 are shown in tables at the end of this section.

PHYSICAL CAPTURE AND CONTROL METHODS OVERVIEW

APHIS-WS Directive 2.101 (USDA 2009) governs tool selection by APHIS-WS employees. In selecting damage management techniques for specific wildlife damage situations, consideration must be given to the species responsible and the frequency, extent, and magnitude of damage. In addition to damage confirmation and assessment, consideration must be given to the status of target and potential nontarget species, local environmental conditions, relative costs of applying management techniques, environmental impacts, and social and legal concerns. These factors must be evaluated in formulating management strategies and may include the application of one or more techniques.

APHIS-WS Directive 2.450 (USDA 2014) sets forth the guidelines for the use of certain types of capture devices by APHIS-WS wildlife specialists. Policy 4 directs that the use of all traps, snares (cable device), and other capture devices must comply with applicable federal, state, and local laws and regulations; traps and trapping devices are not to be used unless appropriate authorization is granted by the landowner or designee; and all exceptions must be authorized by the director. Trapping regulations for California are specified in 14 CCR Section 465.5, and County-funded APHIS-WS activities in the County must adhere to those regulations.

WS Directive 2.450 requires that appropriate warning signs be posted on main entrances or commonly used access points to publicly accessible areas where certain traps or snares are in use. Signs must be routinely checked by APHIS-WS wildlife specialists to ensure they are present, obvious, and readable. Capture devices are to be set where they would minimize the public's view of captured animals. In California, pursuant to California Code of Regulations (CCR), Title 14

Section 465.5, traps must be checked at least once daily, and each time traps are checked, all trapped animals must be removed.

Except in limited cases where CDFW makes an individual exemption, CDFW does not allow the relocation of wildlife causing damage. Relocation of wildlife known to cause resource damage in one area does not correct the damaging behavior and can spread the problem to a new area. Relocation can also spread disease to other wildlife and domestic species. CDFW dictates that the type of disposition of all wildlife captured for resource protection be euthanasia, unless it grants an individual exemption. Captured wildlife may be euthanized using a handgun or rifle, or by chemical means.

Both APHIS-WS tool selection and target specific equipment used by APHIS-WS is protective of nontarget species and animals including threatened and endangered species. In the unlikely event a nontarget species is captured (e.g., in a trap, snare, or cage), APHIS-WS is required to make efforts to release it unharmed, unless the animal is injured and the wildlife specialist has determined that it would not likely survive if released. Incidents of nontarget animal deaths are extremely low. This is due to the techniques used by the APHIS-WS wildlife specialist to ensure that the most target-specific tools and techniques are used.

In addition, APHIS-WS has prepared risk assessments on many of the methods it uses. The risk assessments evaluate the impacts of IWDM methods on people (APHIS-WS employees as well as the public) and the environment. Results of the assessments are also peer-reviewed by non-federal professionals (USDA 2019a).

Padded Leg-Hold Traps

Padded leg-hold traps are used to capture animals such as coyote and bobcat. These traps are the most versatile and widely used tool for capturing these species. The padded leg-hold trap can be set under a wide variety of conditions. In some situations, a "draw station," such as a carcass or large piece of meat, is used to attract target animals. In this approach, one to several traps are placed in the vicinity of the draw station. APHIS-WS program policy prohibits placement of traps closer than 30 feet to the draw station. This provides protection to nontarget animals. These traps usually permit the release of nontarget animals. In California, padded leg-hold traps are used only for the protection of public health and safety and threatened and endangered species. They may not be used to capture animals for agricultural resources protection.

Cage Traps

A variety of cage traps are used in different wildlife damage control efforts. The most commonly known cage traps used in the current program are box traps, which are usually rectangular, made from wood or heavy gauge mesh wire. These traps are used to capture animals alive and can often be used where many lethal or more dangerous tools would be too hazardous. Cage traps usually work best when baited with foods attractive to the target animal. They are used to capture animals ranging in size from mice to bears. However, they are virtually ineffective for coyotes.

Cage traps are well suited for use in residential areas and are the primary management tool used to remove small mammals such as raccoons, skunks, and opossums in urban areas. Traps are placed in the shade whenever feasible, and in California they must be checked at least once daily; each time traps are checked, all trapped animals must be removed, pursuant to 14 CCR Section 465.5. Checking cage traps frequently is done to ensure that captured animals are not

subjected to extreme environmental conditions. Some animals fight to escape from cage traps and become injured.

There are some animals that avoid cage traps and others that become "trap happy" and purposely get captured to eat the bait, making the trap unavailable to catch other animals.

Snares

Snares made of wire or cable are among the oldest existing control tools. They can be used effectively to catch most species but are most frequently used to capture coyotes. They have limited application but are effective when used under proper conditions. They are much lighter and easier to use than padded leg-hold traps and are not generally affected by inclement weather.

Snares may be employed as both lethal or live-capture devices depending on how and where they are set. Snares set to capture an animal by the neck are usually lethal but stops can be applied to the cable to make the snare a live-capture device. Snares positioned to capture the animal around the body can be useful live-capture devices. The foot or leg snare is a spring-powered nonlethal device, activated when an animal places its foot on a trigger pan. Snares can incorporate a breakaway feature to release nontarget wildlife and livestock that are significantly larger than the target species. Snares can be effectively used wherever a target animal moves through a restricted lane of travel (e.g., crawls under fences, trails through vegetation, or den entrances). When an animal moves forward into the loop formed by the cable, the loop tightens and the animal is held.

In some situations, using snares to capture wildlife is impractical due to the behavior or animal morphology of the animal, or the location of many wildlife conflicts. Neck snares must be set in locations where the likelihood of capturing nontarget animals is minimized. The APHIS-WS program uses a leg snare with a built-in pan tension device that can be set to exclude capturing animals lighter than the target animal.

The catch-pole snare is used to capture or safely handle problem animals. This device consists of a hollow pipe with an internal cable or rope that forms an adjustable noose at one end. The free end of the cable or rope extends through a locking mechanism on the end opposite of the noose. By pulling on the free end of the cable or rope, the size of the noose is reduced sufficiently to hold an animal. Catch poles are used primarily to remove live animals from traps or confined areas without danger to or from the captured animal.

The Collarum is a nonlethal, spring-powered, modified neck snare device that is primarily used to capture coyotes. It is activated when the animal bites and pulls a cap with an attractive lure, whereby the snare is projected from the ground up and over its head. As with other types of snares, the use of the Collarum device to capture coyotes is greatly dependent upon finding a location where coyotes frequently travel where the device can be set. Collarums must also be set in locations where the likelihood of capturing nontarget animals is minimized.

Conibear, Quick-Kill, and Snap Traps

A number of specialized "quick-kill" traps are used in wildlife damage management work. A Conibear is an example of such a trap and is used mostly in shallow water or underwater to capture beaver. The Conibear consists of a pair of rectangular wire frames that close like scissors

when triggered, killing the captured animal with a quick body blow. Other examples include snap-traps, such as those commonly used for small rodents such as rats and mice.

Use of Dogs

Trained dogs are used primarily to locate, pursue, or decoy animals. Training and maintaining suitable dogs requires considerable skill, effort, and expense. Dogs are used to track or trail animals, detect particular species or their sign, retrieve animals taken with another method such as firearms, haze animals from an area where they are not wanted such as at an airport or agricultural field, and decoy or attract other species such as coyotes, which are highly territorial. APHIS-WS Directive 2.445 (USDA 2016) governs the use, training, and care of dogs used by the APHIS-WS program.

Shooting

Shooting is frequently performed in conjunction with calling particular predators such as coyotes, bobcats, and fox. Trap-wise coyotes are often vulnerable to calling. Shooting is limited to locations where it is legal and safe to discharge firearms. Shooting may be ineffective for controlling damage by some species and may actually be detrimental to control efforts. Shooting is used selectively for target species but may be relatively expensive because of the staff hours required. The use of no-lead ammunition is required under California Fish and Game Code (FGC) Section 3004.5(b).

The Airborne Hunting Act (Shooting from Aircraft Act) enacted by Congress in 1971 was added to the Fish and Wildlife Act of 1956 (Section 742j-1) and allows shooting animals from aircraft for certain reasons, including protection of wildlife, livestock, and human life as authorized by a federal- or state-issued license or permit.

Chemicals

Pesticides have been developed to reduce wildlife damage and are used because of their efficiency. Most chemicals are aimed at a specific target species, and suitable chemicals are not available for most animals. All pesticides used or recommended by the APHIS-WS program are registered with, and regulated by, the U.S. Environmental Protection Agency and the Department of Pesticide Regulation. APHIS-WS is required to use all chemicals according to label directions as required by these agencies and in accordance with WS Directive 2.401 (USDA 2009), which identifies steps that must be implemented to minimize risk to the environment and the public. Warning signs must be posted. The directive prohibits APHIS-WS from conducting operational activities involving pesticide use on private property where other persons are known to be using the same or a similar pesticide(s) intended for control of the same target species.

Fumigants or gases may be used to reduce burrowing wildlife by placing cartridges in the active burrows of target animals (sometimes referred to as denning), which results in oxygen depletion and carbon monoxide poisoning. Denning is not used in Yuba County.

Sodium cyanide is used in the M-44, a spring-activated, baited ejector device developed specifically to kill coyotes and other canine predators. The M-44 was banned in California in 2014 except as authorized on sovereign tribal lands. There are no tribal lands in Yuba County. In OIG's 2014 audit of APHIS-WS, the audit report specifically noted: "The State of California banned the use of M-44 devices. While we were conducting site visits in California, we examined the hazardous materials records of WS' State and district offices, and of its wildlife specialists. In addition, we

conducted a physical inventory of WS' State, districts, and wildlife specialists' hazardous materials inventories. We determined that WS in California did not use or maintain M-44 devices." (USDA 2015b: 9).

Immobilizing and Euthanizing Drugs

Several chemicals are authorized for immobilization and euthanasia by APHIS-WS. WS Directive 2.430 (USDA 2019b) identifies approved drugs and sets forth requirements for using these substances, most of which are regulated by state and federal law (including the U.S. Food and Drug Administration and the Drug Enforcement Administration) because of their potential hazard to animals or humans. Within APHIS-WS, only properly trained personnel are certified to possess and use approved immobilizing and euthanizing agents. In urban and suburban locations, chemical techniques can be more appropriate for euthanizing wildlife. Chemical capture methods require specialized training and skill.

REFERENCES

USDA (United States Department of Agriculture). 2009. Animal and Plant Health Inspection Service. WS Directive 2.401, Pesticide Use.

———. 2011. WS Directive 2.505, Lethal Control of Animals.

———. 2014. WS Directive 2.450, Traps and Trapping Devices.

———. 2015a. Animal and Plant Health Inspection Service – California Wildlife Services Program. *Pre-Decision Environmental Assessment, Mammal Damage Management in California APHIS-WS North District.*

———. 2015b. Office of the Inspector General. *APHIS Wildlife Services – Wildlife Damage Management.* Audit Report 33601-0002-41. https://www.usda.gov/oig/webdocs/33601-0002-41.pdf.

———. 2016. WS Directive 2.445, Use of Trained Dogs in Wildlife Services Activities.

———. 2019a. Wildlife Services Methods Risk Assessments. Available at: https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs/nepa/ct-ws-risk_assessments

———. 2019b. WS Directive 2.430, Controlled Chemical Immobilization and Euthanizing Agents.

Methods 1998-2006

COUNTY	SPECIES	METHOD	FATE	1998	1999	2000	2001	2002	2003	2004	2005	2006	Grand Total
YUBA	BEARS, BLACK	SNARES, FOOT/LEG	KILLED	1									1
	BEARS, BLACK	TRAPS, CAGE	KILLED	1	6	3	3	1	3				17
	BEARS, BLACK	TRAPS, CULVERT	KILLED						1	1	1	1	4
	BEARS, BLACK Total			**2**	**6**	**3**	**3**	**1**	**4**	**1**	**1**	**1**	**22**
	BEAVERS	CALLING/SHOOTING	KILLED				2						2
	BEAVERS	FIREARMS	KILLED								7	7	14
	BEAVERS	SHOOTING	KILLED	6	2	32	15	29	5	16	5		110
	BEAVERS	SNARES, NECK	KILLED								2	3	5
	BEAVERS	SNARES, NECK z-(OTHER)	KILLED	35	20	16	15	22	13	4	7		132
	BEAVERS	SPOTLIGHTING, NIGHT VISION EQUIPMENT/SH	KILLED		3								3
	BEAVERS	TRAPS, BODY GRIP	KILLED								23	16	39
	BEAVERS	TRAPS, CAGE	KILLED		1	1		2			1	1	6
	BEAVERS	TRAPS, QUICK-KILL (CONIBEAR)	KILLED	59	51	31	50	45	20	41	38		335
	BEAVERS Total			**100**	**77**	**80**	**82**	**98**	**38**	**61**	**83**	**27**	**646**
	BOBCATS	SNARES, NECK z-(OTHER)	KILLED		1								1
	BOBCATS	TRAPS, CAGE	KILLED	1							1	2	4
	BOBCATS Total			**1**	**1**						**1**	**2**	**5**
	CATS, FERAL/FREE RANGING	TRAPS, CAGE	FREED		1								1
	CATS, FERAL/FREE RANGING	TRAPS, CAGE		1	1		2	2		1			7
	CATS, FERAL/FREE RANGING	TRAPS, CAGE					1				1		2
	CATS, FERAL/FREE RANGING	TRAPS, CAGE	RELOCATED									2	2
	CATS, FERAL/FREE RANGING Total			**1**	**2**		**3**	**2**		**1**	**1**	**2**	**12**
	COYOTES	CALLING/SHOOTING	KILLED			2	1						3
	COYOTES	FIREARMS	KILLED								1	1	2
	COYOTES	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED	1	1								2
	COYOTES	SHOOTING	KILLED		5	1	2	7	1				16
	COYOTES	SNARES, FOOT/LEG	KILLED			3	2	1					6
	COYOTES	SNARES, NECK	KILLED								1	6	7
	COYOTES	SNARES, NECK z-(OTHER)	KILLED				1						1
	COYOTES	SNARES, NECK z-(OTHER)		2	7	14	8	23	6	7	1		68
	COYOTES	TRAPS, CAGE	KILLED			1							1
	COYOTES	TRAPS, LEGHOLD (PADDED JAW)	KILLED	11									11
	COYOTES Total			**14**	**13**	**21**	**14**	**31**	**7**	**7**	**3**	**7**	**117**
	CROWS, AMERICAN	PYROTECHNICS (ALL)	DISPERSED			44							44
	CROWS, AMERICAN Total					**44**							**44**
	DEER, z-(OTHER)	SNARES, NECK z-(OTHER)	FREED			1							1
	DEER, z-(OTHER) Total					**1**							**1**
	DOGS, FERAL, FREE-RANGING AN	SNARES, NECK	FREED								1		1
	DOGS, FERAL, FREE-RANGING AND HYBRIDS Total										**1**		**1**
	DOGS, FERAL/FREE RANGING & H	SNARES, NECK z-(OTHER)	FREED	1	1								2
	DOGS, FERAL/FREE RANGING & H	SNARES, NECK z-(OTHER)						1					1
	DOGS, FERAL/FREE RANGING & H	SNARES, NECK z-(OTHER)	KILLED						1				1
	DOGS, FERAL/FREE RANGING & H	TRAPS, CAGE	FREED					1					1
	DOGS, FERAL/FREE RANGING & HYBRIDS Total			**1**	**1**			**2**	**1**				**5**
	EXOTIC BIRDS (OTHER)	TRAPS, CAGE	KILLED						4				4
	EXOTIC BIRDS (OTHER) Total								**4**				**4**
	FOXES, GRAY	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED			1			1				2
	FOXES, GRAY	SNARES, NECK z-(OTHER)	FREED		1								1
	FOXES, GRAY	TRAPS, CAGE	FREED		1								1
	FOXES, GRAY	TRAPS, CAGE		5	1			1		1			8
	FOXES, GRAY	TRAPS, CAGE			1								1
	FOXES, GRAY	TRAPS, CAGE	KILLED				1						1
	FOXES, GRAY	TRAPS, CAGE		1	4				1		1	2	9
	FOXES, GRAY	TRAPS, CAGE	RELOCATED									5	5
	FOXES, GRAY Total			**6**	**8**	**1**	**1**	**1**	**2**	**1**	**1**	**7**	**28**
	FOXES, RED	TRAPS, CAGE	KILLED	1									1
	FOXES, RED Total			**1**									**1**
	LIONS, MOUNTAIN (COUGAR)	DOGS (TRACKING, TRAILING, DECOY)/TAKE	KILLED						4	1			5
	LIONS, MOUNTAIN (COUGAR)	FIREARMS	KILLED								2		2
	LIONS, MOUNTAIN (COUGAR) Total								**4**	**1**	**2**		**7**
	MUSKRATS	TRAPS, BODY GRIP	KILLED									1	1
	MUSKRATS Total											**1**	**1**
	MUSKRATS, z-(OTHER)	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED				1						1
	MUSKRATS, z-(OTHER) Total						**1**						**1**
	OPOSSUMS, VIRGINIA	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED			2		1	3				6
	OPOSSUMS, VIRGINIA	HANDCAUGHT/GATHERED	KILLED									11	11
	OPOSSUMS, VIRGINIA	TRAPS, CAGE	FREED		2								2
	OPOSSUMS, VIRGINIA	TRAPS, CAGE			4	1							5
	OPOSSUMS, VIRGINIA	TRAPS, CAGE										1	1
	OPOSSUMS, VIRGINIA	TRAPS, CAGE	KILLED	4	22	22	29	21	12	12	20	5	147
	OPOSSUMS, VIRGINIA Total			**4**	**28**	**25**	**29**	**22**	**15**	**12**	**20**	**17**	**172**

COUNTY	SPECIES	METHOD	FATE	1998	1999	2000	2001	2002	2003	2004	2005	2006	Grand Total
YUBA	OTTERS, RIVER	SNARES, NECK z-(OTHER)	FREED				1						1
	OTTERS, RIVER Total						1						1
	PIGEONS, FERAL (ROCK DOVE)	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED				1						1
	PIGEONS, FERAL (ROCK DOVE)	HAND CAUGHT (BARE HANDS, SNARE POLE, ETC.)					1		7	1	1		10
	PIGEONS, FERAL (ROCK DOVE)	SHOOTING	KILLED				8	16	10	5			39
	PIGEONS, FERAL (ROCK DOVE)	TRAPS, CAGE	KILLED				2	169	32	169	25		397
	PIGEONS, FERAL (ROCK DOVE) Total						12	185	49	175	26		447
	PIGEONS, FERAL (ROCK)	FIREARMS	KILLED									42	42
	PIGEONS, FERAL (ROCK)	HANDCAUGHT/GATHERED	KILLED									1	1
	PIGEONS, FERAL (ROCK)	TRAPS, CAGE	KILLED									218	218
	PIGEONS, FERAL (ROCK) Total											261	261
	RABBITS, COTTONTAIL	TRAPS, CAGE	FREED					1					1
	RABBITS, COTTONTAIL Total							1					1
	RACCOONS	FIREARMS	KILLED									1	1
	RACCOONS	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED	1									1
	RACCOONS	HANDCAUGHT/GATHERED	KILLED									1	1
	RACCOONS	HANDCAUGHT/GATHERED	RELOCATED								1		1
	RACCOONS	SHOOTING	KILLED					1					1
	RACCOONS	SNARES, NECK z-(OTHER)	KILLED			1			2				3
	RACCOONS	TRAPS, CAGE	FREED					4			1		5
	RACCOONS	TRAPS, CAGE						1					1
	RACCOONS	TRAPS, CAGE	KILLED	4	26		3	3	23	13	9	25	106
	RACCOONS Total			5	26	1	3	9	25	13	11	27	120
	RATS, BLACK (ROOF)	TRAPS, BODY GRIP	KILLED								1		1
	RATS, BLACK (ROOF) Total										1		1
	RATS, NORWAY	TRAPS, CAGE	KILLED							1			1
	RATS, NORWAY Total									1			1
	SKUNKS, STRIPED	DOGS (TRACKING, TRAILING, DECOY)/TAKE	KILLED		1					1			2
	SKUNKS, STRIPED	FIREARMS	KILLED									1	1
	SKUNKS, STRIPED	GAS CARTRIDGE (RODENT) *****	KILLED								1		1
	SKUNKS, STRIPED	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED	1	4		1	1	1	1	1		10
	SKUNKS, STRIPED	HANDCAUGHT/GATHERED	KILLED								1	7	8
	SKUNKS, STRIPED	JABSTICK	KILLED								1		1
	SKUNKS, STRIPED	SHOOTING	KILLED	4	6		26		2	4			42
	SKUNKS, STRIPED	SNARES, NECK z-(OTHER)	KILLED							1	1		2
	SKUNKS, STRIPED	TRAPS, CAGE	KILLED	64	64	45	68	112	86	178	143	179	939
	SKUNKS, STRIPED	TRAPS, LEGHOLD (STEEL JAW)	KILLED	1									1
	SKUNKS, STRIPED Total			70	75	45	95	113	89	185	148	187	1,007
	SQUIRRELS, GRAY	HAND CAUGHT (BARE HANDS, SNARE POLE, ET	KILLED			1			1				2
	SQUIRRELS, GRAY	TRAPS, CAGE	FREED				1						1
	SQUIRRELS, GRAY	TRAPS, CAGE		1									1
	SQUIRRELS, GRAY Total			1		1	1		1				4
	SQUIRRELS, GROUND, CALIFORNI	TRAPS, CAGE	FREED									1	1
	SQUIRRELS, GROUND, CALIFORNI	TRAPS, CAGE	KILLED									15	15
	SQUIRRELS, GROUND, CALIFORNIA Total											16	16
	SQUIRRELS, GROUND, OTHER	TRAPS, CAGE	FREED		2								2
	SQUIRRELS, GROUND, OTHER	TRAPS, CAGE		1									1
	SQUIRRELS, GROUND, OTHER	TRAPS, CAGE	KILLED				2		7	4			13
	SQUIRRELS, GROUND, OTHER Total			1	2		2		7	4			16
YUBA MISC. COUNTY PROJECTS	BEAVERS	TRAPS, BODY GRIP	KILLED									4	4
	BEAVERS Total											4	4
YUBA MISC. COUNTY PROJECTS Total												4	4

Source: USDA APHIS-WS 2019

Methods 2007-2018

COUNTY	DA_TYPE	FATE	SPECIES	METHOD	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Grand Total
YUBA	BIRD	DISPERSED	BLACKBIRDS, BREWER`S	ELECTRONIC HARASSMENT DEVICES (OTHER)									500				500
				FIREARMS			1,300										1,300
			BLACKBIRDS, RED-WINGED	CRACKER SHELLS (12 GAUGE)											1,000		1,000
			BLACKBIRDS, Z-(MIXED SPECIES)	FIREARMS		10,000											10,000
				SCARECROWS (ALL) (OWL, SNAKE, SILHOUETTE)						10,000							10,000
				TAPE, MYLAR						1,000							1,000
				VEHICLES (ALL)						75,000							75,000
			COOTS, AMERICAN	BOMBS/BANGERS								1,000	2,000				3,000
				CAR/TRUCK									5,200				5,200
				CRACKER SHELLS (12 GAUGE)								4,000					4,000
				FIREARMS								2,500					2,500
				LASERS (ALL) (DETERRENT)								3,000					3,000
				REMOTE CONTROLLED VEHICLES (ALL)								1,000					1,000
				WHISTLERS/SCREAMERS								1,000	2,000				3,000
			GEESE, CANADA	PYROTECHNICS (ALL)			350										350
			GEESE, SNOW, LESSER	PYROTECHNICS (ALL)			1,000										1,000
			GEESE, WHITE-FRONTED, GREATER	BOMBS/BANGERS										500			500
				EFFIGY, EAGLE						1,000							1,000
				PYROTECHNICS (ALL)			1,000										1,000
				WHISTLERS/SCREAMERS							43,000						43,000
		FREED	COWBIRDS, BROWN-HEADED	TRAPS, DECOY	29												29
			PIGEONS, FERAL (ROCK)	TRAPS, CAGE				4									4
		KILLED	BLACKBIRDS, BREWER`S	FIREARMS		13	55	17									85
				TRAPS, CAGE				2									2
				TRAPS, DECOY	120	68	41										229
			BLACKBIRDS, RED-WINGED	FIREARMS									38				38
				TRAPS, DECOY	2	12											14
			COOTS, AMERICAN	FIREARMS								36	20				56
			COWBIRDS, BROWN-HEADED	FIREARMS			7										7
				TRAPS, DECOY	189	1,027	496										1,712
			PIGEONS, FERAL (ROCK)	CATCH POLE			4										4
				FIREARMS	97	13	10	74	19	5	7						225
				HANDCAUGHT/GATHERED		7	1										8
				NETS, OTHER		2											2
				TRAPS, CAGE	402	282	145	560	100		16	51					1,556
				TRAPS, DECOY	161	2											163
			SPARROWS, HOUSE	TRAPS, DECOY	8												8
			STARLINGS, EUROPEAN	DRC-1339-FEEDLOTS	100												100
				FIREARMS				6									6
				TRAPS, CAGE	2												2
				TRAPS, DECOY	4,265	1,579	28										5,872
		RELOCATED	PIGEONS, FERAL (ROCK)	TRAPS, CAGE	3		2										5
		REMOVED/DESTROYED	PIGEONS, FERAL (ROCK)	HANDCAUGHT/GATHERED					2								2
		TRANSFER OF CUSTODY	PIGEONS, FERAL (ROCK)	TRAPS, CAGE					10								10
	BIRD Total				**5,378**	**13,005**	**4,439**	**663**	**131**	**87,005**	**43,023**	**12,587**	**9,758**	**500**	**1,000**		**177,489**
	MAMMAL	CAPTURED	SWINE, FERAL	TRAPS, CAGE	1												1
		DISPERSED	COYOTES	ELECTRONIC HARASSMENT DEVICES (OTHER)									6				6
		FREED	BEARS, BLACK	TRAPS, CAGE					1								1
				TRAPS, CULVERT											1		1
			BOBCATS	DOG		1											1
			CATS, FERAL/FREE RANGING	TRAPS, CAGE			1	1									2
			DOGS, FERAL, FREE-RANGING AND HYBRIDS	SNARES, NECK		1											1
				TRAPS, CAGE					1								1
			FOXES, GRAY	TRAPS, CAGE					1								1
				TRAPS, CULVERT								1				1	2
			SKUNKS, STRIPED	TRAPS, CAGE											1		1
		KILLED	BEARS, BLACK	TRAPS, CAGE					1			1		1	1		4
				TRAPS, CULVERT	2				3			4	2		5	2	18
			BEAVERS	FIREARMS	10	10	14	10	7	42	38	7	17	3	11	17	186
				NIGHT VISION/INFRARED EQUIPMENT					4	14	33	25	2	8	8		94
				SNARES, NECK	6	7	9	8	4	4						1	39
				TRAPS, BODY GRIP	39	36	68	65	68	18	26	7	1	2		2	332
				TRAPS, CAGE	1					2					9	3	15
				TRAPS, SUITCASE						2	8						10
			BOBCATS	CATCH POLE		1											1
				SNARES, NECK	2												2
				TRAPS, CAGE	1												1
			CATS, FERAL/FREE RANGING	TRAPS, CAGE				19	1								20
			COYOTES	CALLING DEVICE, ELECTRONIC			1			10			4		1		16
				FIREARMS		2	1			15	5	2					25
				HANDCAUGHT/GATHERED		1											1
				SNARES, FOOT/LEG		2	1	3									6
				SNARES, NECK	14	25	15	15	3								72
			FOXES, GRAY	CATCH POLE	1	1											2
				FIREARMS						1	2		1		1	2	7
				HANDCAUGHT/GATHERED	1												1
				SNARES, FOOT/LEG				1									1
				TRAPS, CAGE		2	1	3	7	2	3						18
			LIONS, MOUNTAIN (COUGAR)	FIREARMS	1	4	1		1	3	1		1			2	14
				NIGHT VISION/INFRARED EQUIPMENT									1	1	2	1	5

COUNTY	DA_TYPE	FATE	SPECIES	METHOD	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Grand Total
YUBA	MAMMAL	KILLED	MUSKRATS	FIREARMS			1										1
				TRAPS, BODY GRIP			15	17								1	33
			OPOSSUMS, VIRGINIA	CATCH POLE	1		1	1									3
				FIREARMS											1	2	3
				HANDCAUGHT/GATHERED					1								1
				TRAPS, CAGE	12	13	10	14	15	20	18	5	1	2			110
			OTTERS, RIVER	TRAPS, BODY GRIP					4								4
			RABBITS, FERAL	TRAPS, CAGE						1							1
			RACCOONS	CATCH POLE		1											1
				FIREARMS		1						1	1	2	7	8	20
				TRAPS, CAGE	23	16	19	12	26	25	38	27	17	10	12	4	229
			SKUNKS, SPOTTED	TRAPS, CAGE	2	2		1					1				6
			SKUNKS, STRIPED	FIREARMS	1		1		3	2	3	27	7	23	26	9	102
				HANDCAUGHT/GATHERED		1		3									4
				JABSTICK			2										2
				SNARES, NECK	1	2		1									4
				TRAPS, CAGE	90	73	74	60	54	72	75	72	52	38	39	54	753
			SQUIRRELS, GROUND, CALIFORNIA	FIREARMS						4							4
				TRAPS, CAGE		2			6								8
			SWINE, FERAL	FIREARMS				2	2	2							6
				SNARES, FOOT/LEG				1									1
				TRAPS, CAGE				1	1								2
				TRAPS, CORRAL					7								7
		RELOCATED	BATS (OTHER)	HANDCAUGHT/GATHERED				1									1
				NETS, OTHER	1												1
			CATS, FERAL/FREE RANGING	TRAPS, CAGE				2									2
			DOGS, FERAL, FREE-RANGING AND HYBRIDS	SNARES, NECK			1										1
			MUSKRATS	HANDCAUGHT/GATHERED				1									1
			PORCUPINES	CATCH POLE	1												1
		REMOVED/DESTROYED	BEAVERS	HAND TOOLS	15	22	46	70	79	61	70	16	9	6	57	18	469
			SQUIRRELS, GROUND (OTHER)	GAS CARTRIDGE, GIANT DESTROYER					10								10
		TRANSFER OF CUSTODY	CATS, FERAL/FREE RANGING	TRAPS, CAGE					1								1
			SQUIRRELS, WESTERN GRAY	HANDCAUGHT/GATHERED					2								2
			SWINE, FERAL	TRAPS, CAGE				2									2

Source: USDA APHIS-WS Management Information System 2019