

**July 18, 2017**  
**Regular Meeting**  
**Item #1**

**Opportunity for the  
Public to Address the  
Board**

# **FREE** Energy Efficiency Retrofits for Businesses

*Southern California Edison's Business Direct Install program contractor will be in our area the week of July 10th. If you are interested in having your business evaluated to see if you could benefit and are eligible for free energy efficiency lighting retrofits, please send your business name, SCE service account number and street address to **[bold@highsierraenergy.org](mailto:bold@highsierraenergy.org)**.*

**Don't miss this opportunity.**  
**Remember, the cheapest and cleanest energy is the energy you don't use!**

## **FREE ENERGY EVALUATIONS**

Send your business name, SCE service account number and street address to:  
**[bold@highsierraenergy.org](mailto:bold@highsierraenergy.org)**

*Programs are funded by California utility ratepayers and administered by SCE under the auspices of the California Public Utilities Commission.*

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**EASTERN SIERRA ENERGY  
INITIATIVE**

A Southern California Edison Energy Partnership  
with Mammoth Lakes, Bishop, and Inyo and Mono Counties

**July 18, 2017**  
**Regular Meeting**  
**Item #9a**  
**Agricultural**  
**Commissioner**

**2016 Crop and**  
**Livestock Report**

# 2016

## Inyo and Mono Counties Crop and Livestock Report



Counties of Inyo and Mono Agricultural Commissioner's Office  
207 W South Street, Bishop, CA 93514

# Counties of Inyo and Mono Agricultural Commissioner's Office 2016 Crop and Livestock Report

## CONTENTS:

- 1 Letter from the Commissioner
- 2 Functions of the Agricultural Commissioner's Office
- Agricultural Statistics—Inyo County**
- 4 General Information
- 5 Livestock and Livestock Products, Field Crops
- 6 Nursery, Apiary, Fruit & Nut, Vegetable Production
- 7 Inyo County Totals
- Agricultural Statistics—Mono County**
- 8 General Information
- 9 Livestock and Livestock Products, Field Crops
- 10 Fruit & Nut, Forestry, Nursery Production
- 11 Mono County Totals
- Combined Statistics—Inyo and Mono Counties**
- 12 Five Year Comparison, Sierra Nevada Runoff Chart
- Department Programs**
- 13 Direct Marketing
- 14 Sustainable Agriculture/Outreach Program
- 15 Weights and Measures Enforcement
- 16 Owens Valley Mosquito Abatement
- 17 CACASA History

## STAFF:

### **Agricultural Commissioner / Director of Weights and Measures**

Nathan Reade

### **Ag/Weights & Measures Inspector**

David Miller

### **Account Technician**

Jennifer Sarten

### **Field Technician – Weed Management**

Carlos Paz

### **Manager / Owens Valley Mosquito Abatement Program**

Chris Wickham

### **Mosquito Control Technicians**

Bruce Mack

Robert Miller





# Counties of Inyo & Mono

Nathan D. Reade  
Agricultural Commissioner / Director of Weights and Measures  
207 W. South Street, Bishop, CA 93514  
Telephone – (760) 873-7860 Fax – (760) 872-1610  
Email – inyomonoag@gmail.com Web - www.inyomonoagriculture.com



Karen Ross, *Secretary*  
*California Department of Food and Agriculture*

Brian Leahy, *Director*  
*California Department of Pesticide Regulation*

The Honorable Board of Supervisors,  
County of Inyo

Mark Tillemans, *Chair*

Matt Kingsley

Rick Pucci

Jeff Griffiths

Dan Totheroh

The Honorable Board of Supervisors,  
County of Mono

Stacy Corless, *Chair*

Bob Gardener

Fred Stump

John Peters

Larry Johnston

I am pleased to present the 2016 Inyo and Mono Counties' Annual Crop and Livestock Report. This report is prepared pursuant to California Food and Agriculture Code 2279, and is a statistical compilation of agriculture production in Inyo and Mono Counties. These values reflect **gross** agricultural production within the two counties, and do not represent net profit or loss.

The gross combined agricultural production values for Inyo and Mono Counties in 2016 totaled \$44,155,000, representing a decrease of 11.3% from 2015 production values. Drought continued to weigh on production, with cumulative losses representing a 44.4% reduction in total value for our region since the beginning of the multi-year drought period.

Cattle production remained relatively stable in 2016 as herd sizes were reduced to minimal levels due to poor forage conditions during the extended drought period. Beef pricing, however, declined for Inyo and Mono ranchers, driving production value down over 2015. Livestock value losses were tempered somewhat by a return of feeder cattle to local range.

Alfalfa and other hay production was impacted by low pricing, reducing this commodity group as well. Some irrigated pasture production loss occurred in Mono County as a result of LADWP decisions to not irrigate a vast portion of Long Valley due to drought, and acreage associated with these lands was moved into the rangeland commodity category for 2016.

Bright spots included both sheep production value increases, as well as more thorough reporting that resulted in increases in the fruit and nut category for both counties, and the inclusion of nursery production values for Mono County.

Sincerely,

Nathan D. Reade  
Agricultural Commissioner



## Counties of Inyo and Mono Agricultural Commissioner's Office

The mission of the Inyo and Mono Counties Agricultural Commissioner's Office is to promote and protect the agricultural industry of the counties, protect the environment, and to ensure the health and safety of all of its citizens. The department is also responsible for fostering confidence and equity in the marketplace.

The following are the main program areas:

### Human Safety and Environmental Protection

The County Agricultural Commissioner's Office protects the health and safety of all Inyo/Mono residents, its agricultural industries and its environment with a series of comprehensive regulatory programs designed to prevent the introduction of exotic pests and to ensure the safe use of pesticides. The five programs that exist to achieve these goals include:

- Pest Exclusion
- Pest Detection
- Pest Eradication
- Pest Management
- Pesticide Enforcement

### Consumer Protection and Product Quality

Product quality programs are designed to ensure the production and sales of quality eggs, honey, fruits, vegetables, and nursery and seed products. Quality standards that these programs ensure include maturity, grade, size, and weight. Packaging and labeling are also examined to ensure consumer expectations are met. The six programs include:

- Fruit and Vegetable Quality Control
- Organic Food Production
- Egg Quality Control
- Certified Farmers' Markets
- Nursery Inspection
- Seed Inspection

### Special Agricultural Services

The Agriculture Department also provides other mandated services, including:

- Apiary Inspection
- Crop Statistics
- Sustainable Agriculture



## Administrative and Education Outreach

Staff participate in a wide range of special projects intended to benefit Inyo/Mono citizens such as the legislative process, public information, education outreach efforts, as well as joint multi-agency and inter-county cooperative activities. Continuing education efforts sponsored by the Agriculture Department for pesticide safety help to ensure that local license-holders maintain adequate training.

## Eastern Sierra Weed Management Area

This division of the Agricultural Commissioner's office consists of 15 federal, state, county, and local agencies and entities. The Eastern Sierra Weed Management Area is dedicated to the eradication and control of invasive plant species in Inyo and Mono Counties through the cooperation and coordination of participating entities. The Eastern Sierra Weed Management Area participates in public outreach and education activities to ensure that people understand the threat of non-native weeds on our environment and agriculture industry.

## Weights and Measures

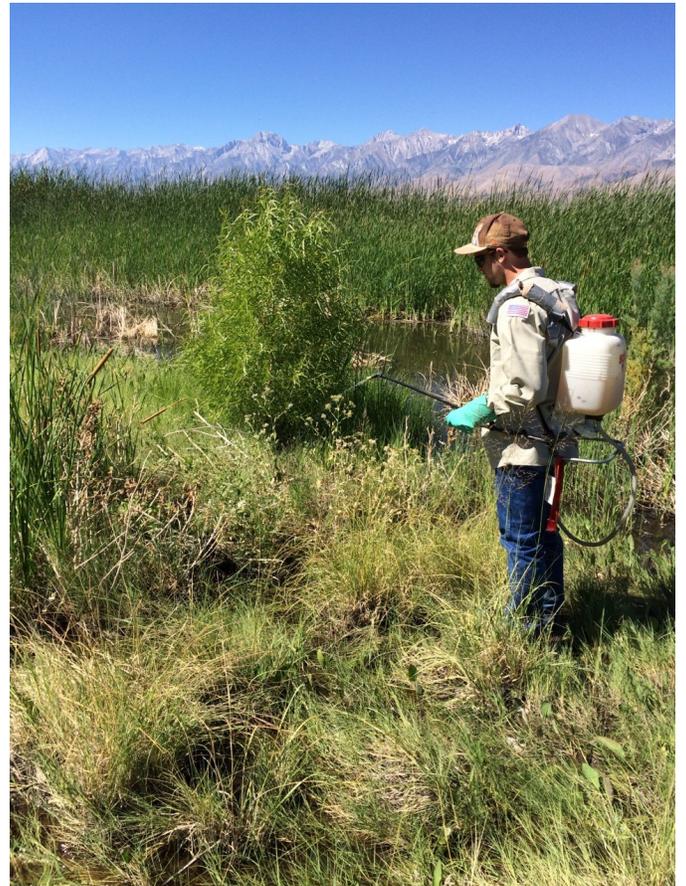
A gallon of gasoline, a cord of firewood, a loaf of bread, or a pound of fruits or vegetables...any item purchased is sold by weight, measure, or count. We protect the public from purchasing goods that are short weight or measure, and we protect businesses from giving their products and profits away when they use devices that could be inaccurate. We also verify that prices are scanned correctly at the counter, petroleum products meet quality standards, and weighmasters provide their customers accurate weighing devices. The eight programs in this category include:

- Weight Verification
- Measurement Verification
- Petroleum
- Transaction Verification
- Electronic Meters
- Compressed Gas Meters
- Weighmaster
- Device Repairmen Regulation

See page 15 for more information on this division.

## Owens Valley Mosquito Abatement Program

The purpose of this program is to provide the public with a consistent level of mosquito control that reduces the threat of disease transmission and the spread of large nuisance populations of mosquitoes. See page 16 for more information on this division.



# 2016

## Inyo County Crop and Livestock Statistics

### Inyo County General Information

County Seat:	Independence	<u>Average Climate</u>	
County Population:	18,546 (2010 census)	High	Low
Land Area:	10,142 sq. miles	Bishop:	98° 22°
Population Density:	1.83 persons per sq. mile	Death Valley:	115° 37°
Highest Elevation:	14,505 ft. (Mount Whitney)		
Lowest Elevation:	-282 ft. (Badwater, D.V.N.P.)		

#### Unincorporated Areas

Big Pine	Olancha
Cartago	Pearsonville
Independence	Shoshone
Lone Pine	

#### Land Ownership

Federal:	92.0%
City of Los Angeles:	3.9%
State of California:	2.4%
Private:	1.7%

#### Incorporated Cities

Bishop



## Livestock & Livestock Products

	Year	Unit	Production	Value per Unit	Total****	
Cattle & Calves	2016	Head	7,670	\$1,045	\$8,013,000	▼ 16%
	2015		7,680	\$1,243	\$9,550,000	
Sheep & Lambs**	2016	Head	3,815	\$164	\$625,700	▲ 26%
	2015		3,670*	\$154	\$496,000*	
Eggs	2016	Dozen	4,350	\$4.75	\$20,600	▲ 14%
	2015		4,020	\$4.50	\$18,100	
Wool	2016	Lbs	26,700	\$1.54	\$41,000	▲ 7%
	2015		23,900	\$1.59	\$38,000	
Miscellaneous***	2016				\$186,000	▲ 447%
	2015				\$34,000	
<b>Total Value</b>				<b>2016</b>	<b>\$8,886,000</b>	▼ 12%
				<b>2015</b>	<b>\$10,136,000*</b>	

\* Adjusted figure

\*\* Includes feeder lamb gain.

\*\*\* includes beef stocker gain, goats, hogs, and poultry.

\*\*\*\*Total may not calculate due to rounding

## Field Crops

	Year	Unit	Production	Value per Unit	Total**	
Alfalfa Hay	2016	Ton	15,100	\$180	\$2,718,000	▼ 12%
	2015		15,100	\$200	\$3,100,000	
Pasture, Irrigated	2016	Acre	14,000	\$70	\$980,000	= 0%
	2015		14,000	\$70	\$980,000	
Pasture, Rangeland	2016	Acre	1,150,000	\$1.12	\$1,288,000	= 0%
	2015		1,150,000	\$1.12	\$1,288,000	
Miscellaneous*	2016	-	280	-	\$758,000	▼ 8%
	2015		655	-	\$824,000	
<b>Total Value</b>				<b>2016</b>	<b>\$5,744,000</b>	▼ 7%
				<b>2015</b>	<b>\$6,192,000</b>	

\* Includes garlic, grain hay, sudangrass, and other hay

\*\*Total may not calculate due to rounding

## Nursery Products

	Year	Unit	Production	Value per Unit	Total	
Nursery Stock*	2016	Acre	121	-	\$1,032,000	▼ 36%
	2015		121	-	\$1,620,000	
<b>Total Value</b>				<b>2016</b>	<b>\$1,032,000</b>	▼ 36%
				<b>2015</b>	<b>\$1,620,000</b>	

\* Includes cacti and succulents, palms, and turf.

## Apiary Production

	Year	Unit	Production	Value per Unit	Total	
Honey	2016	Lb	155,600	\$2.09	\$325,200	▲ 5%
	2015		154,000	\$2.01	\$310,000	
Miscellaneous*	2016	-	-	-	\$5,600	▲ 4%
	2015		-	-	\$5,400	
<b>Total Value</b>				<b>2016</b>	<b>\$330,800</b>	▲ 5%
				<b>2015</b>	<b>\$315,000</b>	

\* Includes beeswax and pollen.

## Fruit & Nut Crops

	Year	Unit	Production	Value per Unit	Total	
Miscellaneous*	2016	Acres	35	-	\$333,200	▲ 64%
	2015		32	-	\$203,000	
<b>Total Value</b>				<b>2016</b>	<b>\$333,200</b>	▲ 64%
				<b>2015</b>	<b>\$203,000</b>	

\* Includes almonds, apples, apricots, blackberries, cherries, dates, figs, grapes (table), grapes (wine), nectarines, peaches, pears, pecans, persimmons, plums, pomegranates, raspberries, strawberries, and walnuts.

## Vegetable Crops

	Year	Unit	Production	Value per Unit	Total	
Miscellaneous*	2016	Acres	7	-	\$42,000	▼ 7%
	2015		9	-	\$45,000	
<b>Total Value</b>				<b>2016</b>	<b>\$42,000</b>	▼ 7%
				<b>2015</b>	<b>\$45,000</b>	

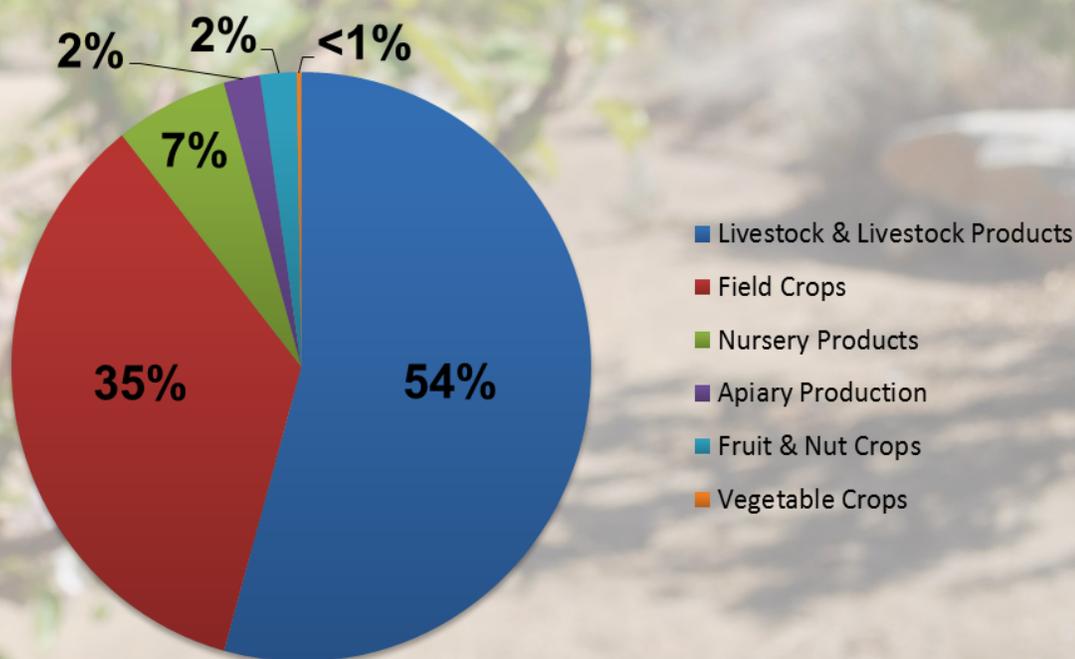
\* Includes Includes artichokes, beans, brassicas, carrots, cucumbers, eggplant, garlic, herbs, leafy greens, melons, onions, peppers, pumpkins, radishes, squash, sweet corn, tomatillos, tomatoes, and tubers.



## Inyo County Totals

	Year	Total	
Livestock & Livestock Products	2016	\$8,886,000	
	2015	\$10,136,000	▼ 12%
Field Crops	2016	\$5,744,000	
	2015	\$6,192,000	▼ 17%
Nursery Products	2016	\$1,032,000	
	2015	\$1,620,000	▼ 36%
Apiary Production	2016	\$330,800	
	2015	\$315,000	▲ 5%
Fruit & Nut Crops	2016	\$333,200	
	2015	\$203,000	▲ 64%
Vegetable Crops	2016	\$42,000	
	2015	\$45,000	▼ 7%
<b>Total Value</b>	<b>2016</b>	<b>\$16,368,000</b>	
	<b>2015</b>	<b>\$18,511,000</b>	<b>▼ 12%</b>

## Inyo County Agricultural Production



# 2016

## Mono County Crop and Livestock Statistics

### Mono County General Information

County Seat:	Bridgeport	<u>Average Climate</u>	
County Population:	14,202 (2010 census)	High	Low
Land Area:	3,044 sq. miles	Bridgeport:	81° 8°
Population Density:	4.67 persons per sq. mile	Hammil Valley:	98° 22°
Highest Elevation:	14,252 ft. (White Mountain)		

#### Unincorporated Areas

Benton	June Lake
Bridgeport	Lee Vining
Chalfant Valley	Topaz
Coleville	Tom's Place
Hammil Valley	Walker

#### Land Ownership

Federal:	84.7%
City of Los Angeles:	3.2%
State of California:	3.6%
Private:	6.5%

#### Incorporated Cities

Mammoth Lakes



## Livestock & Livestock Products

	Year	Unit	Production	Value per Unit	Total***	
Cattle & Calves	2016	Head	8,230	\$1,045	\$8,603,000	▼ 16%
	2015		8,200	\$1,243	\$10,193,000	
Sheep & Lambs*	2016	Head	14,870	\$164	\$2,439,000	▲ 14%
	2015		13,900	\$154	\$2,141,000	
Wool	2016	Lbs	119,300	\$1.54	\$183,700	▲ 7%
	2015		107,800	\$1.59	\$171,000	
Miscellaneous**	2016				\$2,570,000	▲ 80%
	2015				\$1,425,000	
<b>Total Value</b>				<b>2016</b>	<b>\$13,796,000</b>	▼ 1%
				<b>2015</b>	<b>\$13,930,000</b>	

\* Includes feeder lamb gain.

\*\* includes beef stocker gain, goats, hogs, and poultry.

\*\*\*Total may not calculate due to rounding

## Field Crops

	Year	Unit	Production	Value per Unit	Total**	
Alfalfa Hay	2016	Ton	47,200	\$180	\$8,496,000	▼ 16%
	2015		50,600	\$200	\$10,120,000	
Pasture, Irrigated	2016	Acre	26,000	\$70	\$1,820,000	▼ 40%
	2015		43,000	\$70	\$3,010,000	
Pasture, Rangeland	2016	Acre	1,072,000	\$1.39	\$1,490,000	▲ 5%
	2015		1,055,000	\$1.35	\$1,424,000	
Miscellaneous*	2016	-	1,473	-	\$2,063,000	▼ 23%
	2015		2,600	-	\$2,685,000	
<b>Total Value</b>				<b>2016</b>	<b>\$13,869,000</b>	▼ 20%
				<b>2015</b>	<b>\$17,239,000</b>	

\* Includes garlic, grain hay, sudangrass, and other hay

\*\*Total may not calculate due to rounding

## Fruit & Nut Crops

	Year	Unit	Production	Value per Unit	Total	
Miscellaneous*	2016	Acres	18	-	\$43,300	▲ 12%
	2015		18	-	\$38,800	
			<b>Total Value</b>	<b>2016</b>	<b>\$43,300</b>	▲ 12%
				<b>2015</b>	<b>\$38,800</b>	

\* Includes grapes (wine), pome fruit, and stone fruit.

## Forest Products

	Year	Total	
Timber and Firewood	2016	\$59,000	▲ 72%
	2015	\$34,400	
<b>Total Value</b>		<b>2016</b>	▲ 72%
		<b>2015</b>	

## Nursery Products

	Year	Unit	Production	Value per Unit	Total	
Nursery Stock*	2016	Acre	1	-	\$20,000	N/A
	2015		0	-	\$0	
			<b>Total Value</b>	<b>2016</b>	<b>\$20,000</b>	N/A
				<b>2015</b>	<b>\$0</b>	

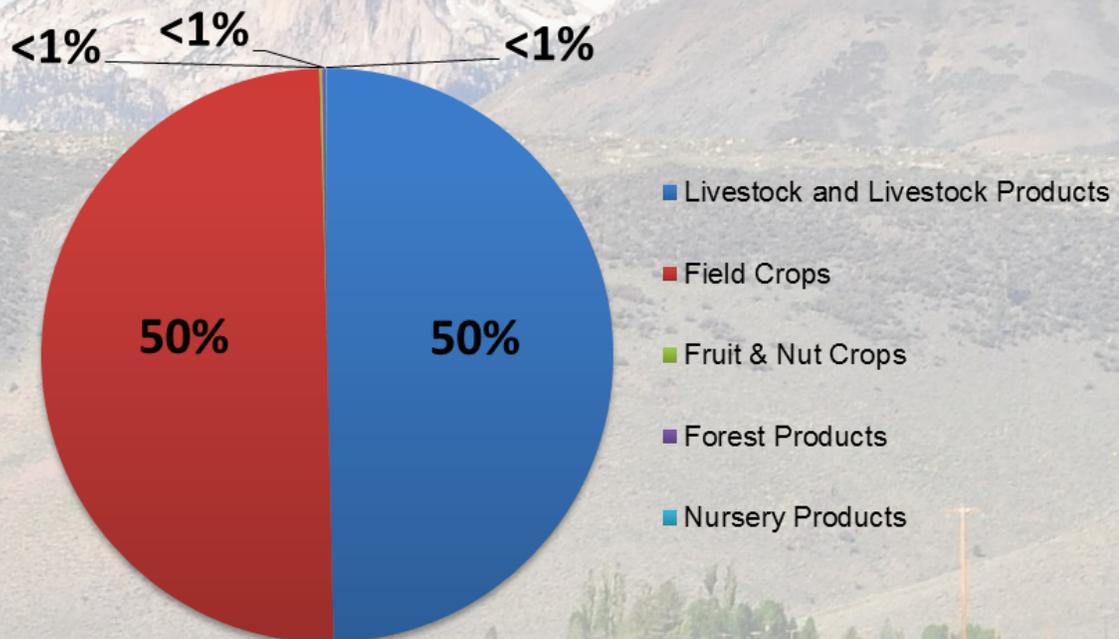
\* Includes various ornamental plants



## Mono County Totals

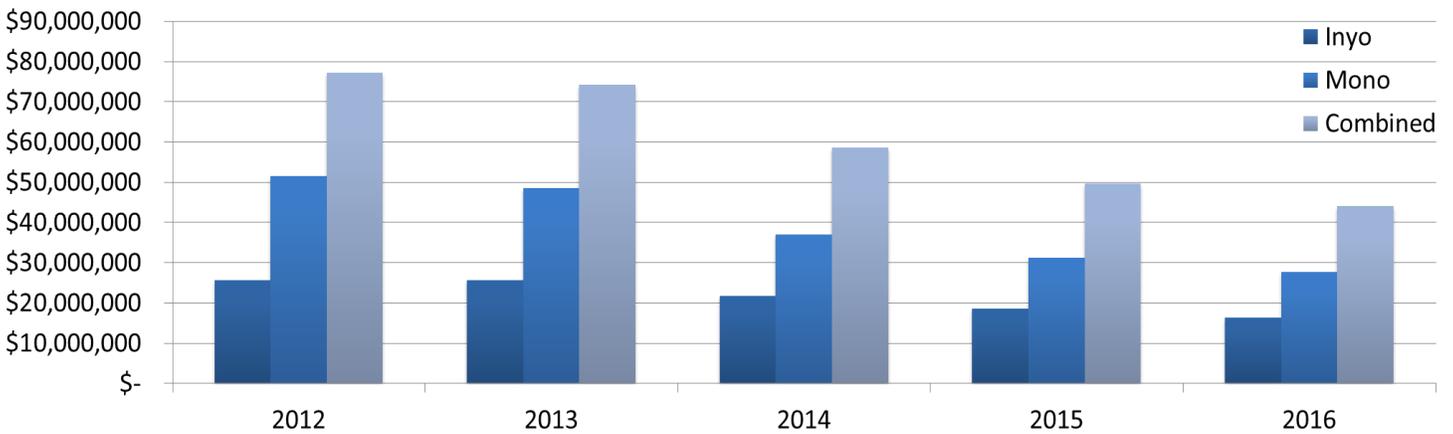
	Year	Total	
Livestock & Livestock Products	2016	\$13,796,000	▼ 1%
	2015	\$13,930,000	
Field Crops	2016	\$13,869,000	▼ 20%
	2015	\$17,239,000	
Fruit & Nut Crops	2016	\$43,300	▲ 12%
	2015	\$38,800	
Forest Products	2016	\$59,000	▲ 72%
	2015	\$34,400	
Nursery Products	2016	\$20,000	N/A
	2015	\$0	
<b>Total Value</b>	<b>2016</b>	<b>\$27,787,000</b>	<b>▼ 11%</b>
	<b>2015</b>	<b>\$31,242,000</b>	

## Mono County Agricultural Production

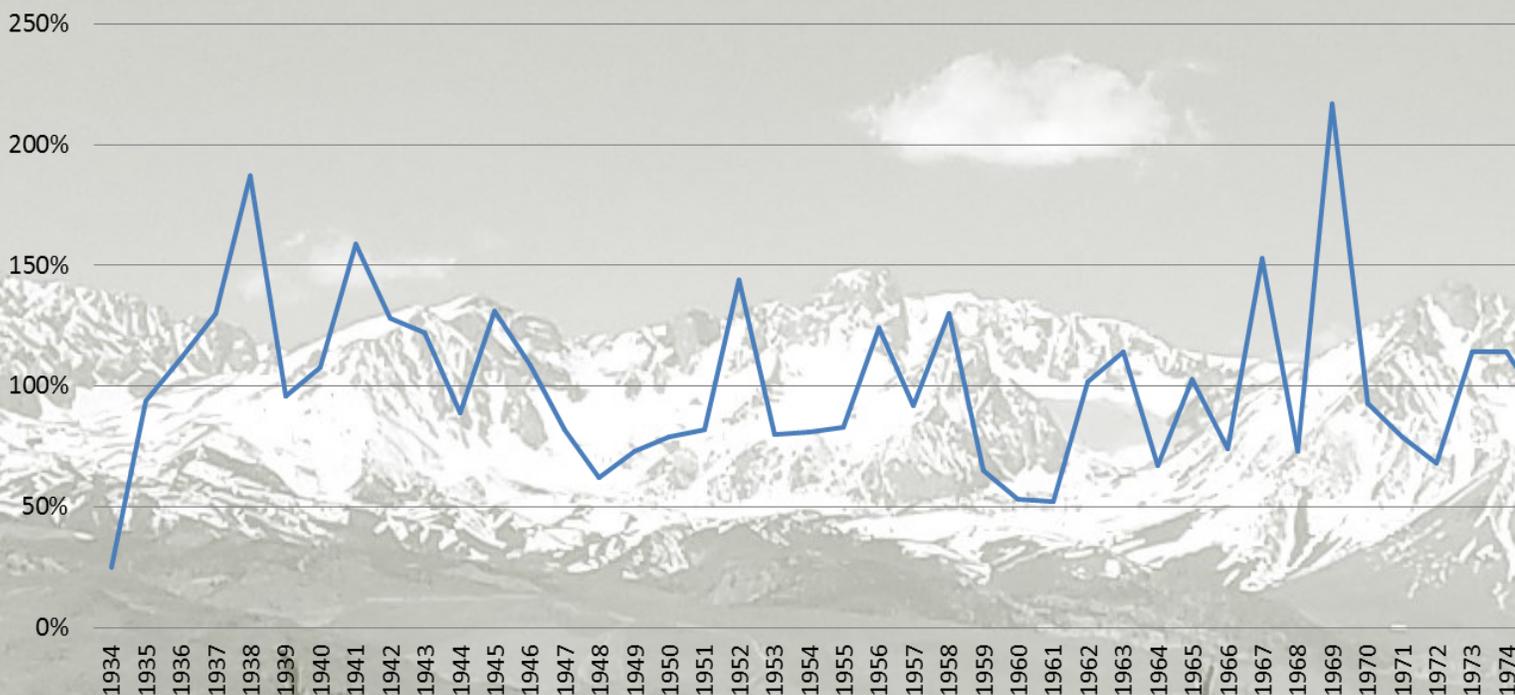


# Five Year Comparison

	2012	2013	2014	2015	2016
<b>Inyo County Totals</b>	<b>\$25,693,000</b>	<b>\$25,648,000</b>	<b>\$21,659,000</b>	<b>\$18,511,000</b>	<b>\$16,368,000</b>
<b>Mono County Totals</b>	<b>\$51,588,000</b>	<b>\$48,503,000</b>	<b>\$36,947,000</b>	<b>\$31,242,000</b>	<b>\$27,787,000</b>
<b>Combined Totals</b>	<b>\$77,281,000</b>	<b>\$74,151,000</b>	<b>\$58,606,000</b>	<b>\$49,753,000</b>	<b>\$44,155,000</b>



# Eastern Sierra Runoff Chart



# Direct Marketing

## Certified Farmer's Market

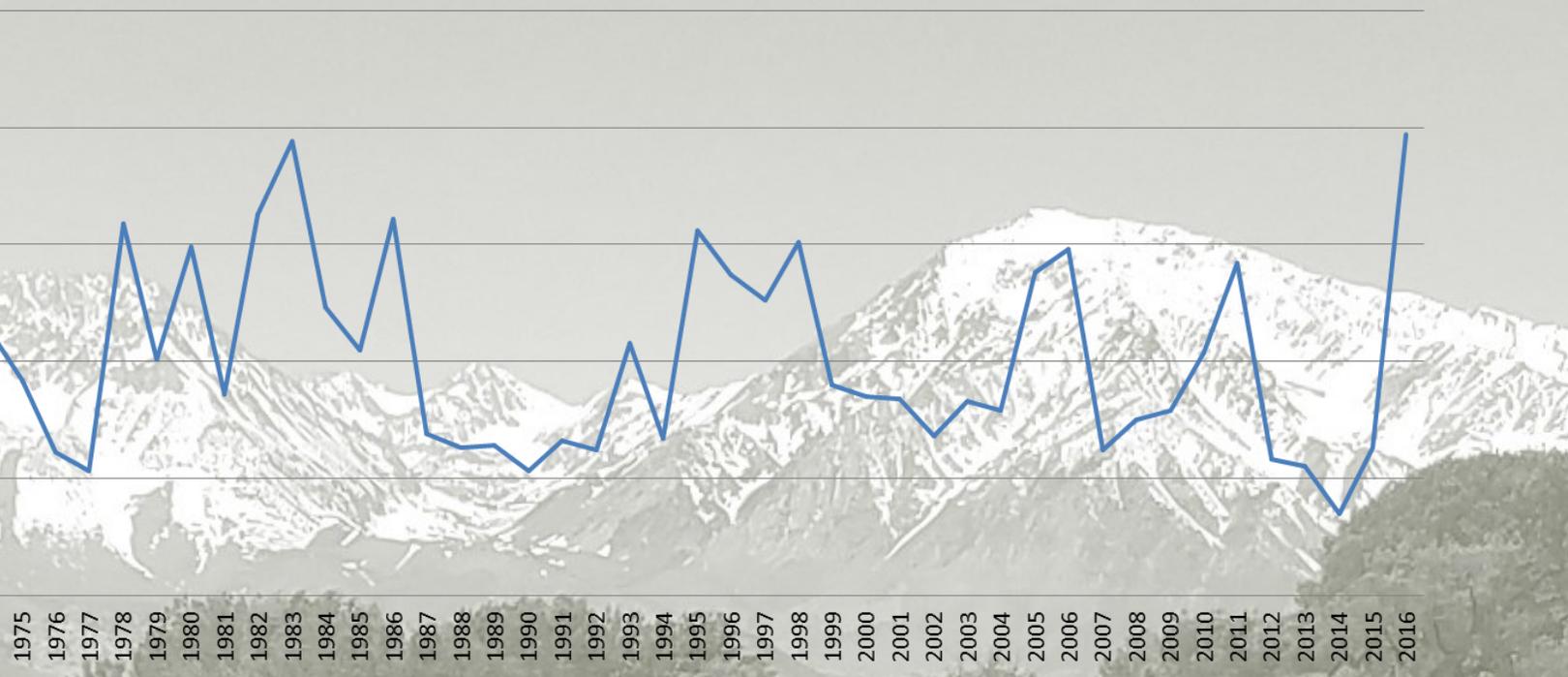
26 growers registered as Certified Producers in 2016.

### Certified Farmer's Market locations included:

- Mammoth Lakes
- Bishop
- Independence

### Commodities Grown by Certified Producers

Basil, chervil, chives, cilantro, dill, marjoram, parsley, rosemary, sage, tarragon, thyme, lavender, oregano, lemongrass, mint, mustard, paprika, spinach, sunflower, corn, eggplant, tomato, squash, cucumber, peppers, green onions, potatoes, pumpkins, okra, onions, beets, garlic, asparagus, artichoke, celery, carrots, radishes, rutabaga, leek, lettuce, broccoli, cauliflower, kale, arugula, sweet potatoes, Swiss chard, bok choy, cabbage, collard, Brussels sprouts, zucchini, shallots, tomatillos, turnip, grapes, apples, peaches, pears, nectarines, apricots, cherries, plums, persimmons, pomegranate, pluot, rhubarb, figs, watermelon, cantaloupe, honeydew, raspberries, blackberries, boysenberries, strawberries, peas, sweet peas, various bean varieties, almonds, walnuts, cut flowers, honey, and eggs.



# Sustainable Agriculture and Outreach

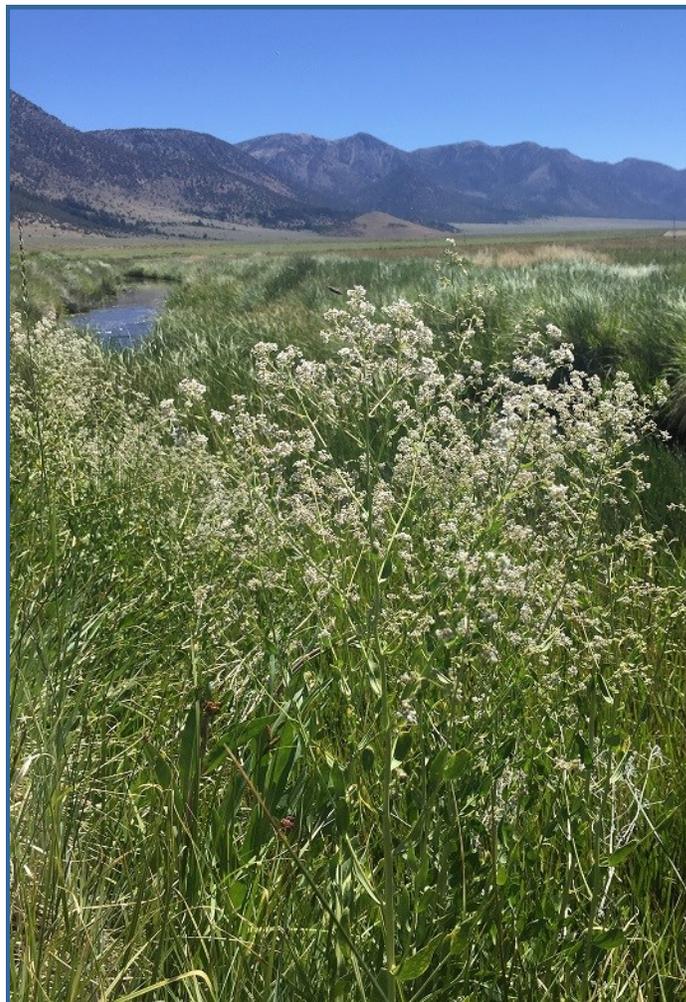
Invasive Plant Targets			
Pest	Agent/Mechanism	Number of Sites	Gross Acres
Puncturevine	Biological Control	14 sites	~
Dalmatian Toadflax	Mechanical	2 sites	220
Yellow Starthistle	Mechanical/Herbicide	2 sites	10
Russian Knapweed	Herbicide	3 sites	100
Canada Thistle	Herbicide	8 sites	400
Spotted Knapweed	Herbicide	3 sites	4
Halogeton	Mechanical	5 sites	4,400
Scotch Thistle	Herbicide	8 sites	1,311
Camelthorn	Herbicide	1 site	40
Saltcedar	Herbicide	1 site	80
Perennial Pepperweed	Herbicide	53 sites	12,000

## Outreach Program

During 2016, the Inyo/Mono Counties' Agriculture Department conducted:

- 2 pesticide safety seminars with over 100 professional card holders and private applicators attending, to meet California state continuing education requirements;
- 2 educational workshops for local groups;
- Participation with the Owens Lake Committee and Integrated Regional Water Management Planning Group to resolve major water issues in the Owens Valley.

The Department's inspection surveillance area, which encompasses over 10,000 square miles, provided outreach from northern Mono County, including several California and Nevada field crop growers located in the Antelope Valley area, to the southern tip of Inyo County, including a large commercial turf grass farm in the Sandy Valley, near Las Vegas, Nevada. The Inyo/Mono Agricultural Commissioner's office is tasked with the surveillance of 50% of the California/Nevada border for pests that could endanger the agricultural industry of California.



# Weights & Measures

## Device Inspection Program

We are responsible for inspection, certification, or condemnation of all commercially used meters (retail motor fuel, propane/vapor, and electric), scales (aggregate and cement hoppers, vehicle, live-stock, computing, platform and spring scales); and any other type of device that is used to weigh or measure to determine a value for the purpose of sales. Enforcement actions can include issuance of citations initiating prosecution of violations. Of the 1,200+ devices inspected, 20 Notice of Violations were issued. All consumer complaints received by the Inyo/Mono Counties' Weights and Measures Department resulted in further inspections throughout the year. Regular inspections protect consumers from misrepresentation and maintain fair competition between sellers.

## Petroleum Program

We ensure the quality of petroleum products sold within the two Counties including; sampling of fuels, inspection and investigation of complaints. We also oversee all commercial advertisements of such products including price signs and labeling.

## Package Inspections

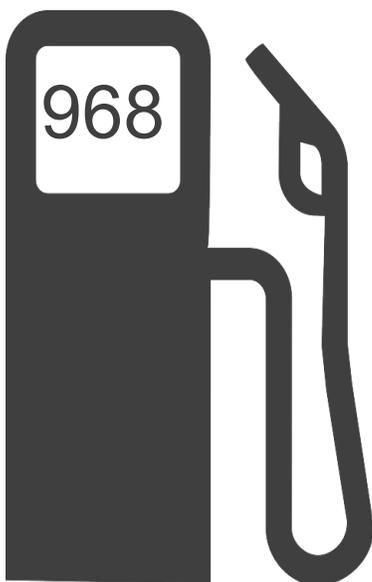
We inspect pre-packaged commodities in retail and wholesale facilities to determine proper weights, count or volume. We also verify proper sales equipment involving scanners, performing test purchases to insure accurate charges.

## Weighmaster Enforcement

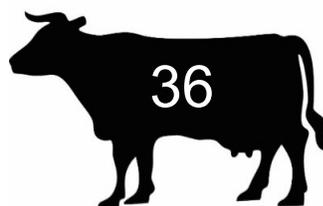
Weighmaster licenses are issued through our office to persons or entities that sell bulk commodities. Enforcement of weighmaster laws ensures that these transactions are accurate.

## Device Repairman Regulation

Anyone who installs or repairs a weighing or measuring device in Inyo or Mono Counties must register with our office and inform our office when work takes place. This ensures that devices are not tampered with and transaction equity.



Retail Fuel Meters



Livestock Scales



Counter and Computing Scales



Vehicle Scales



Aggregate Scales

32 Other Weighing and Measuring Devices

# Owens Valley Mosquito Abatement

## What is the mosquito control program?

The purpose of the program is to control mosquito populations throughout the Owens Valley from Olancho to Round Valley so that these pests and their associated diseases are abated adequately.

## Monitoring

The Owens Valley Mosquito Abatement Program (OVMAP) conducts surveillance to determine mosquito populations using several methods. Mosquito traps are deployed in several locations throughout the Owens Valley, and are checked frequently to determine level of adult mosquito populations. Disease monitoring is component of this trapping effort, and insects caught in traps are sent to sample for the presence of certain diseases that mosquitos are known to spread. Complaints are logged and responded to, creating records that can also help with monitoring efforts. At times, staff will travel to areas where complaints are high and record landing rates of mosquitos to further gauge population density.

## Biocontrol

**Mosquito Fish** - The mosquito fish have been one of the most effective non-insecticidal and non-chemical methods of controlling mosquitoes for over eighty years. They breed throughout the summer and new broods are produced at intervals of about six weeks, with 50 to 100 young in a single brood. They are ready to begin the work of destroying mosquito larvae at once. Mosquito fish can eat mosquito larvae as fast as the larvae hatch from eggs, as many as 100 per day. Mosquito fish live 2-3 years and can tolerate a wide range of temperatures.

**Larvaciding** - Routine larviciding of many hundreds of mosquito sources each week prevent immature mosquito larvae from reaching the flying and biting adult stage. This preferred first option for killing mosquitos is the cheapest and most effective method.

## Adulticiding

When larvaciding does not control mosquito populations adequately, OVMAP conducts adulticiding measures to protect our local communities from irritating insect bites and the potential for spreading of disease.

## Public Outreach and Cultural/Environmental Control

Outreach to residents about altering or removing conditions that best suit mosquito breeding is another effective tool in the OVMAP toolbox. These controls include proper irrigation practices, pool maintenance, and even making sure small containers or tires stored outside do not fill with stagnant water. Reducing the habitat conducive to mosquito breeding in the very areas where we live is a large step toward fewer itchy bites. Outreach efforts occur throughout the year through personal contact and social media, as well as at community events such as the Tri-County Fair.





### The Evolution of California Agricultural Commissioners and Sealers

The California Agricultural Commissioners trace their origins back 136 years. The goal of the Agricultural Commissioners is to protect the State's crops from the ravages of pests both domestic and imported. Then, as now, one of the principle weapons employed was a legal device called a "quarantine", which is derived from the French word "quarante", meaning "forty". The quarantine came about as a detention device, its first use being in the year 1340 when passengers on ships bound for Venice, Italy, were detained on board ship for 40 days. This was considered a long enough period to determine whether or not those passengers carried with them the Black Plague, which was killing many people in Europe in the mid-14th century.

California's first statewide program, which was the beginning of the present Department of Food and Agriculture, began with "An Act For the Promotion of Viticultural Industries of the State" on April 5, 1880. It provides for the appointment of a Board of State Viticultural Commissioners whose duties included the study of the grape root rot disease, *Phylloxera*. The Act specified that the University of California was responsible for instruction and experiments - a concept still existing today - giving the University the authority for research and the Department the regulatory functions. The Act provided for seven viticultural districts.

Until the year 1911, the duties of the State Board of Horticulture, the State Commissioner of Horticulture, county boards of horticulture commissioners and the county horticulture commissioners were limited to just a few obligations. These obligations consisted of preventing the introduction into the state of the pests from outside its boundaries, prevention of spread of insect pests and plant diseases through the media of nursery stock, fruit boxes, and other containers, and the inspection of nurseries. The years that followed would find the duties not only intensified in the same areas, but expanded into many other aspects of agriculture.

In the beginning the regulatory concern was to protect the California farmer from the depredations of exotic pests. After 1911, these duties were to be expanded to include concerns of the market place (standardization), and such cultural aids as assistance to the farmer in weed control and control of rodents and other damaging creatures. Later, they would enlarge to assure the farmer honest weights and measures, and protection from unscrupulous middlemen. Finally, the regulations would blossom into the full relationship of the farmer and the consumer.

Today, the California Department of Food and Agriculture and County Agricultural Commissioners are as busy helping the consumer as they are the farmer. They keep exotic pests away from the farmer's fields by fighting them in city gardens, where they nearly always are found first in the State. By so doing, they are affording city people as much protection as farmers, for these pests generally can wreak as much havoc in the city as in the country. They provide for, and oversee, standardization practices, thus insuring the farmers good markets for their products and insuring quality for consumers. They promote marketing of goods in a variety of ways, also assuring quality and quantity to consumers. They look after the health of livestock and plants, and the same benefits accrue to the consumer. They insist on measurement standards that also have dual blessings; and they assure the consumer and the farmer protection against the careless use of pesticides, thus affording protection to both people and the environment.



COUNTIES OF INYO AND MONO  
Department of Agriculture and Weights & Measures  
207 W South Street  
Bishop, CA 93514



# **Agriculture in Inyo & Mono Counties: An Economic Profile**



June 2017

**Agricultural Impact Associates LLC**

## **Table of Contents**

<b>Agricultural Commissioner’s Letter.....</b>	<b>1</b>
<b>Executive Summary.....</b>	<b>2</b>
<b>Acknowledgments .....</b>	<b>4</b>
<b>List of Tables and Figures.....</b>	<b>4</b>
<b>Introduction and Methods.....</b>	<b>5</b>
<b>Ten Research Questions.....</b>	<b>6</b>
<div style="background-color: #e0f2f7; padding: 10px;"><ul style="list-style-type: none"><li>#1. What is the total direct economic value of agriculture?</li><li>#2. How has the total direct value of agriculture changed over time?</li><li>#3. What economic “multiplier effect” does agriculture create?</li><li>#4. What is agriculture’s total economic contribution, including multiplier effects?</li><li>#5. How do agriculture’s economic contributions vary by land ownership type?</li><li>#6. What contributions does agriculture make through local employment and taxes?</li><li>#7. What economic relationships exist within agriculture that straddle both counties?</li><li>#8. What “ecosystem services” do agricultural lands provide to society?</li><li>#9. How economically diverse is agriculture?</li><li>#10. What options exist to add economic value to local agricultural production?</li></ul></div>	
<b>Conclusion .....</b>	<b>46</b>



## Counties of Inyo & Mono

Nathan D. Reade  
Agricultural Commissioner / Director of Weights and Measures  
207 W. South Street, Bishop, CA. 93514  
Telephone – (760) 873-7860 Fax – (760) 872-1610  
Email – [inyomonoag@gmail.com](mailto:inyomonoag@gmail.com) Web – [www.inyomonoagriculture.com](http://www.inyomonoagriculture.com)



### The Honorable Board of Supervisors, County of Inyo

Mark Tillemans, *Chairman*

Matt Kingsley      Rick Pucci  
Jeff Griffiths      Dan Totheron

### The Honorable Board of Supervisors, County of Mono

Stacy Corless, *Chairman*

Bob Garner      Fred Stump  
John Peters      Larry Johnston

I am pleased to share **Agriculture in Inyo & Mono Counties: An Economic Profile**. This report takes an important step beyond the annual *Crop and Livestock Report* we have published over the past several decades. Instead of stopping at production values and acreage, it quantifies agriculture’s total economic contribution through food production, employment, and economic “multiplier effects.” It also examines agriculture’s economic diversity, ecosystem services, production across different land ownership types, inter-county relationships, and opportunities to expand through greater diversification.

Section 2279 of the California Food and Agriculture Code requires all county agricultural commissioners to report the annual “value” of agriculture. This typically occurs via our yearly *Crop and Livestock Report*. Using twenty-first century economic tools, we can now fulfill this mandate better than ever. We can also explore additional topics that clarify agriculture’s role in sustaining a healthy local economy.

Agriculture has a long tradition in both Inyo and Mono Counties. For more than 150 years, it has been a pillar of our economy and culture. With this report, we renew our commitment to sustaining that tradition well into the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "N. Reade".

Nathan D. Reade  
Agricultural Commissioner,  
Director of Weights & Measures

# Agriculture in Inyo & Mono Counties: An Economic Profile

## Executive Summary

For more than a century, agriculture has provided a vital link between Inyo and Mono Counties' cultural past and economic future. Although the counties' annual *Crop and Livestock Report* documents production values across various categories, it does not attempt to capture agriculture's larger economic profile. This report helps fill part of that knowledge gap. Drawing from multiple sources, it examines agriculture's broader economic implications.

The analysis supports ten main conclusions, in particular:

- **#1. Direct production value.** For 2015, agriculture produced a combine total of \$49.7 million across both counties, including \$18.5 million from Inyo and \$31.2 million from Mono. "Livestock & Livestock Products" was the largest category, contributing 48.3% of the counties' combined total.
- **#2. Steady, overall growth.** Despite recent dips and variations across counties and categories, total farm production values have shown steady, long-term growth. From 2000 to 2015, the combined total output for both counties rose \$14.1 million (39.6%). This growth outpaced inflation by 3.9%.
- **#3. Multiplier effects.** Agricultural production creates ripples in the local economy. For example, every dollar's worth of economic output from Inyo "Livestock & Livestock Products" creates an extra 64 cents in purchases from suppliers and spending by agricultural employees.
- **#4. Total economic output.** Agriculture's multiplier effects totaled \$9.0 million in Inyo and \$19.9 million in Mono, for a combined total of \$28.9 million. When added to the \$49.7 million in direct output mentioned above, agriculture's combined total economic output rises to \$78.6 million.
- **#5. Ownership of agricultural lands.** Across both counties combined, federal agencies own most of agricultural land (88.7%) and rangeland pasture is the most common use (97.2% of total area). Among field crops, private lands contributed the highest dollar output (63.8% of the total), mostly through alfalfa hay production (66.6% of all output).

- **#6. Employment and taxes.** Across both counties combined, agriculture provided 239 direct jobs plus an additional 210 from multiplier effects, for a total of 449 jobs. Total combined tax payments across local, state, and federal levels were \$6,287,128.
- **#7. Cross-county interdependencies.** Seasonal movement of cattle herds across county lines creates complex economic interdependencies. For example, an acre of Mono County irrigated pasture accounts for \$1,657 in production combined across both counties. Alfalfa contributes \$10,525.
- **#8. Significant non-market values.** Agricultural lands provide society with wildlife habitat, scenic beauty, carbon storage, and many other “ecosystem services.” Established methodologies exist for quantifying the economic value of these contributions.
- **#9. Economic diversity within agriculture.** Combined across the two counties, the agricultural industry has an economic diversity index score of 1.75. While low, the number has remained stable over the past decade, unlike many California counties that have seen declines.
- **#10. Expansion through diversification.** Agriculture faces expansion opportunities through five diversification strategies. In terms of specific diversification focal areas, local meat processing remains an especially promising area, along with agritourism, cannabis and wineries.

Overall, the results provide an especially detailed look at agriculture’s economic role, as well as key information gaps to fill in the future. The findings should be of use to a wide ranges of stakeholders. Individual producers, for example, can understand how their operations fit into larger context. Public agency and non-profit staff can better understand agriculture’s current and potential future role in sustaining a healthy economy.

## Acknowledgments

Agricultural Impact Associates LLC ([www.ag-impact.com](http://www.ag-impact.com)) produced this report under contract to the Inyo & Mono Counties Department of Agriculture, Weights & Measures. The Mono County Community Development Department provided additional funding. Lead authors were Dr. Jeff Langholz ([jeff@ag-impact.com](mailto:jeff@ag-impact.com)) and Dr. Fernando DePaolis ([fernando@ag-impact.com](mailto:fernando@ag-impact.com)). Nathan Reade supervised the project on behalf of Inyo & Mono Counties. We thank several local agricultural experts for sharing their expertise during development of this report. The cover photo is courtesy of Inyo & Mono Counties Department of Agriculture, Weights & Measures.

## List of Figures and Tables

### Figures

Figure 1: Long-term Trends in Production Value

Figure 2. Sample Ranch in the CDFA Ecosystem Services Database

Figure 3. Ecosystem Services Provided by Inyo and Mono Counties' Agricultural Lands

Figure 4. Agricultural Economic Diversity is More Than Just the Number of Crops

Figure 5. How Economically Diverse is Agriculture in Inyo & Mono Counties?

Figure 6. Five Major Strategies for Agricultural Diversification

### Tables

Table 1: Distribution of Inyo and Mono Counties' Agriculture by Production Value

Table 2. Economic Output Multipliers

Table 3. Overall Economic Effect of Inyo County Agriculture

Table 4. Overall Economic Effect of Mono County Agriculture

Table 5. Overall Economic Effect of Both Counties Combined

Table 6. Inyo County Economic Effect By Land Ownership & Use

Table 7. Mono County Economic Effect By Land Ownership & Use

Table 8. Mono & Inyo Counties' Combined Economic Effect By Land Ownership & Use

Table 9. Employment Effect of Inyo County Agriculture

Table 10. Employment Effect of Mono County Agriculture

Table 11. Employment Effect of Inyo & Mono Counties Combined

Table 12. Tax Base Effect of Inyo County Agriculture

Table 13. Tax Base Effect of Mono County Agriculture

Table 14. Tax Base Effect of Inyo & Mono Counties Combined

## Introduction

Residents and visitors alike know and value the rural character of Inyo and Mono Counties. Cattle graze in vast pastures and alfalfa fields green the valley floors. Farmers markets overflow with fresh produce and community spirit. Clearly, agriculture plays a key role in sustaining a healthy local economy. What's not so clear, however, is the true size of that role. How much money does agriculture pump into the local economy? How many jobs does agriculture support? What other economic implications does agriculture have?

This report sheds light on these and related questions. Using multiple data sources and advanced economic modeling techniques, it analyzes economic aspects of Inyo and Mono Counties' agriculture. The report focuses on ten questions shown in the box below.

### Ten Research Questions

1. What is the total direct economic value of agriculture?
2. How has the total direct value of agriculture changed over time?
3. What economic "multiplier effects" does agriculture create?
4. What is agriculture's total economic contribution considering direct and multiplier effects?
5. How do agriculture's economic contributions vary by land ownership type?
6. What contributions does agriculture make through local employment and taxes?
7. What economic relationships exist within agriculture that straddle both counties?
8. What "ecosystem services" do agricultural lands provide to society?
9. How economically diverse is agriculture?
10. What options exist to add economic value to local agricultural production?

Although the report does not attempt to cover every aspect of agriculture's economics, it represents the most detailed analysis to date. The findings should be of interest to a wide range of stakeholders, including policy makers, growers, ranchers, and all others who value a vibrant local economy.

## Methods

Primary data collection took place in late 2016 and early 2017. To maximize accuracy, we used a hybrid approach that combined multiple methods, researchers, and sources. Please consult the authors for additional details on the methods used.

We sourced quantitative data from local experts, annual *Crop and Livestock Reports*, and a widely used economic modeling program called IMPLAN. Using econometric modeling, IMPLAN converts data from more than a dozen federal government sources into local values for every U.S. county and zip code, as well as for each of 536 industry sectors. Except where otherwise noted, all figures are from the year 2015, the most recent IMPLAN dataset available. For additional details on IMPLAN, please see the sections below and [www.IMPLAN.com](http://www.IMPLAN.com).

Qualitative data collection consisted of three methods. First, we conducted personal interviews with local experts from public and private sector organizations. These experts provided highly informed perspectives into local agriculture. Second, we collected and reviewed a wide range of key documents. These documents included written policies, program evaluations, annual reports, financial statements, business plans, newspaper articles, scholarly studies, and others. Third, we drew from direct observations, having spent ample time in both counties over the course of many years.

Our analysis emphasizes agriculture's economic contributions. To understand agriculture's full economic impact, one would also need to assess agricultural-related costs to society, for example net impacts on water and other natural resources. While important, these impacts lie beyond the scope of this study.

## 1. What is the total direct value of agriculture?

This section focuses on the simplest measures of economic output: production. It describes total farm production across various production categories.

**Table 1** shows the various categories that make up Inyo and Mono Counties' farm production value. "Livestock & Livestock Products" was the single largest production category by dollar value, comprising \$24.0 million and 48.3% of the counties' combined total. "Cattle & Calves" dominated this category, consisting of \$9.6 million for Inyo and \$10.2 million for Mono. The remaining \$4.3 million (17.9%) of the "Livestock and Livestock Products" category includes sheep, lambs, wool, eggs, and miscellaneous other livestock products.

At \$23.4 million, "Field Crops" was the second largest category (47.1%). "Field Crops" consisted mostly of three sub-categories: 1) "Alfalfa Hay" at \$13.2 million and 56.4%; 2) "Pasture (Irrigated)" at \$4.0 million and 17.0%; and 3) "Pasture (Rangeland)" at \$2.7 million and 11.6%. The remainder includes garlic, grain hay, sudangrass, and other miscellaneous field crops accounting for \$3.5 million and 15.0%.

Together, these two major categories contributed \$47.5 million (95.5%) of the counties' combined, direct farm production values. For 2015, that combined, total farm production value was \$49.7 million.

This gross value does not reflect net profit or loss experienced by individual growers or by the industry as a whole. Interested readers are encouraged to consult the annual *Crop and Livestock Report* for additional details.

**Table 1: Distribution of Inyo and Mono Counties’ Agriculture by Production Value**

Production Category	INYO County		MONO County		COMBINED	
	\$ Value	%	\$ Value	%	\$ Value	%
Livestock / Livestock Products	\$10,114,000	54.7%	\$13,930,000	44.6%	\$24,044,000	48.3%
Field Crops	\$6,192,000	33.5%	\$17,239,000	55.2%	\$23,431,000	47.1%
Nursery Products	\$1,620,000	8.8%	-	-	\$1,620,000	3.3%
Fruit & Nut Crops	\$203,000	1.1%	\$38,800	0.1%	\$241,800	0.5%
Apiary Production	\$315,000	1.7%	-	-	\$315,000	0.6%
Vegetable Crops	\$45,000	0.2%	-	-	\$45,000	0.1%
Forest Products	-	-	\$34,400	0.1%	\$34,400	0.1%
<b>TOTALS:</b>	<b>\$18,489,000</b>	<b>100%</b>	<b>\$31,242,200</b>	<b>100%</b>	<b>\$49,731,200</b>	<b>100%</b>

Source: 2015 *Crop and Livestock Report*

## 2. How has the total direct value of agriculture changed over time?

How has agriculture’s direct economic output changed over time? **Figure 1** shows long-term production trends. For Inyo County, total growth in agricultural production from 2000 to 2015 was \$4.0 million (+27.7%). Mono agriculture grew \$10.1 million (+47.7%). Combined, the two counties grew \$14.1 million (39.6%).

Inflation averaged 2.2% during this period and totaled 35.7%. **Figure 1** does not reflect this increase. Thus, in “real” (inflation adjusted) terms, Inyo lost 8.0% over the sixteen-year period while Mono gained 12.0%. Combined, the counties gained 3.9%.

**Figure 1** highlights three additional patterns. First, the dominant trend has been one of slow, steady growth. Notwithstanding inflation-adjusted results and recent dips, total production value tends to climb over time. The “steady growth” pattern goes back at least thirty years, as a graphic in the 2014 *Crop and Livestock Report* showed.

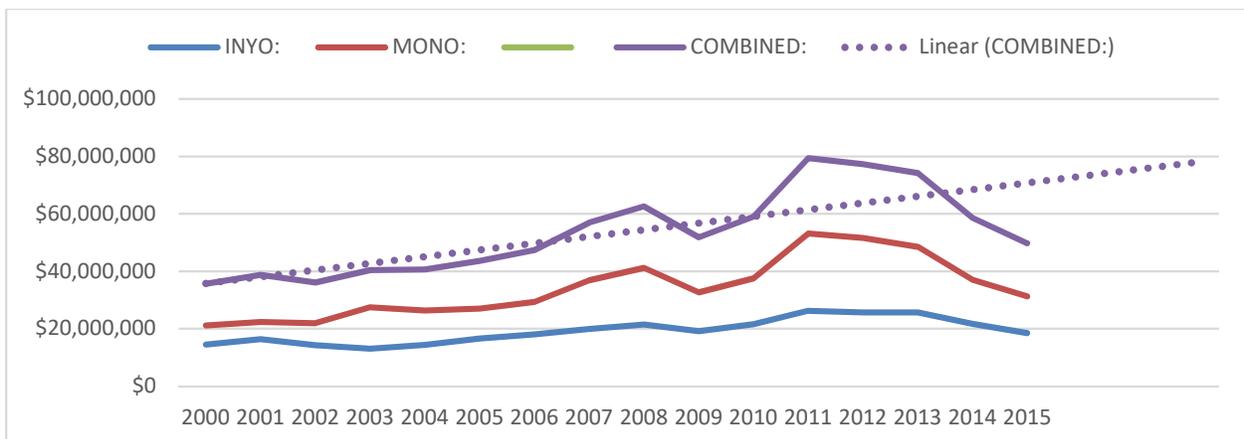
Second, the two counties tend to move in tandem. This might indicate similar production patterns, vulnerabilities to external economic forces, and/or significant inter-county relationships such as those described in Section #7.

Third, recent fluctuations represent a variation from the usual pattern. The long-term trend has not only been one of growth, but also of little variation. The sharp rise starting in 2011, followed by the steep decline of 2014 and 2015, stand in stark contrast to the long-term growth trend.

**Figure 1** includes a linear trend line. This dashed line shows what one would expect to happen in 2016, 2017, and 2018 based on sixteen previous data points. Note that the predicted trend continues upward, despite recent declines.

Only time will tell if production values return to their long-term trend. One working hypothesis is that the big drop during 2014 and 2015 was simply a “correction” to above-average growth during the preceding three years, i.e. from 2011 to 2013. A deep drought may have exacerbated the correction. An alternative hypothesis is that something has fundamentally changed and the decades-long growth story is ending. The next few years should shed light on which explanation seems most valid, especially considering the wet winter of 2016-2017.

**Figure 1: Long-term Trends in Production Value**



### 3. What economic “multiplier effect” does agriculture create?

When it comes to economic analysis, it is important to examine the fullest possible range of economic contributions. This report does that by focusing not just on *direct* economic effect such as farm production and employment, but also on *multiplier effects*. *Multiplier effects* are ripples through the economy. These ripples include inter-industry "business to business" supplier purchases as well as "consumption spending" by employees.

It is appropriate to calculate *multiplier effects* when analyzing what economists call a *basic industry*. A *basic industry* is one that sells most of its products beyond the local area and thus brings outside money into local communities. Agriculture is a basic industry in Inyo and Mono Counties. For example, nearly all of the cattle go to other counties for processing into meat products. Thus, this report includes *multiplier effects* when describing agriculture's total economic contribution.

Economic ripples take two forms: *indirect effects* and *induced effects*. The first consist of "business to business" supplier purchases. For example, when a rancher buys vehicles, fuel, insurance, feed, medicine, banking services, veterinary services, and other inputs, this creates *indirect effects*.

The second ripple type, *induced effects*, consist of "consumption spending" by agriculture business owners and employees. They spend income on housing, groceries, utilities, healthcare, leisure activities, and other things for their households. All of this spending creates ripples in the economy.

Economists calculate *indirect* and *induced* effects by using multipliers. Multipliers are numbers that when applied to direct economic output values, quantify the ripple effect. **Table 2** shows economic multipliers for major production categories. We used IMPLAN multipliers as a starting point, then customized them to reflect local production and benchmark data from other California counties.

For example, Inyo County "Livestock & Livestock Products" has an *indirect effects* multiplier of 0.4940. This means that each dollar's worth of direct output generates an extra 49 cents in supplier purchases. The 0.1424 *induced effects* multiplier means that each dollar's worth of direct economic output also generates an extra 14 cents in consumption spending by agriculture owners and employees.

**Table 2. Economic Output Multipliers**

	INYO Output		MONO Output	
	Indirect Effects Multiplier	Induced Effects Multiplier	Indirect Effects Multiplier	Induced Effects Multiplier
Livestock / Livestock Products	0.4940	0.1424	0.5112	0.3728
Field Crops	0.1264	0.1725	0.1220	0.3139
Nursery Products	0.0587	0.2392	n/a	n/a
Fruit & Nut Crops	0.0757	0.2562	0.0609	0.6098
Apiary Production	0.1639	0.2724	n/a	n/a
Vegetable Crops	0.0830	0.2600	n/a	n/a
Forest Products	n/a	n/a	0.0489	0.2689

\* Note: "n/a" indicates zero production value for a given category, thus no multiplier effect

Note that individual production sectors all have different multipliers for *induced* and *indirect* output. For example, the *indirect effect* multiplier for Mono County “Livestock & Livestock Products” is nearly seven times higher than for “Fruit & Nut Crops.” The *induced effect* multiplier for Mono County “Livestock & Livestock Products,” however, is lower than for all other production categories. Multipliers also vary across counties, reflecting where and how much agricultural companies and their employees can and do spend money.

#### 4. What is agriculture’s total economic contribution, including multiplier effects?

The previous sections have provided key pieces to an economic puzzle. This section combines those puzzle pieces into a fuller picture showing the larger economic output effect of Inyo and Mono Counties’ agriculture.

Applying economic multipliers from the previous section, **Table 3** shows agriculture's direct, indirect, and induced economic effects for major production categories in Inyo County. The total economic contribution was \$27.5 million. This consisted of \$18.5 million in direct output from production, plus \$9.0 million in multiplier effects.

**Table 3. Overall Economic Effect of Inyo County Agriculture**

	Output for INYO County			
	Direct Output	Indirect Effects Output	Induced Effects Output	Total Output (Direct + Indirect + Induced )
<b>Livestock &amp; Livestock Products</b>	\$10,114,000	\$4,996,588	\$1,440,010	\$16,550,598
<b>Field Crops</b>	\$6,192,000	\$782,511	\$1,068,405	\$8,042,916
<b>Nursery Products</b>	\$1,620,000	\$95,015	\$387,473	\$2,102,488
<b>Apiary Production</b>	\$315,000	\$51,623	\$85,815	\$452,438
<b>Fruit &amp; Nut Crops</b>	\$203,000	\$15,371	\$52,013	\$270,384
<b>Vegetable Crops</b>	\$45,000	\$3,736	\$11,698	\$60,435
<b>TOTALS:</b>	<b>\$18,489,000</b>	<b>\$5,944,845</b>	<b>\$3,045,414</b>	<b>\$27,479,259</b>

**Table 4** shows agriculture's direct, indirect, and induced economic effects for major production categories in Mono County. The total economic contribution was \$51.1 million. This consisted of \$31.2 million in direct output from production, plus \$19.9 million in multiplier effects.

**Table 4. Overall Economic Effect of Mono County Agriculture**

	<b>Output for MONO County</b>			
	<b>Direct Output</b>	<b>Indirect Effects Output</b>	<b>Induced Effects Output</b>	<b>Total Output (Direct + Indirect + Induced )</b>
<b>Livestock &amp; Livestock Products</b>	\$13,930,000	\$7,120,346	\$5,193,787	\$26,244,133
<b>Field Crops</b>	\$17,239,000	\$2,102,914	\$5,411,529	\$24,753,444
<b>Fruit &amp; Nut Crops</b>	\$38,800	\$2,364	\$23,661	\$64,825
<b>Forest Products</b>	\$34,400	\$1,681	\$9,250	\$45,331
<b>TOTALS:</b>	<b>\$31,242,200</b>	<b>\$9,227,306</b>	<b>\$10,638,228</b>	<b>\$51,107,733</b>

**Table 5** combines both counties into a single snapshot of agriculture’s total economic effect. Including all seven major production categories, the total economic contribution was \$78.6 million. This consisted of \$49.7 million in direct output from production, plus \$28.9 million in multiplier effects. These totals capture economic contributions beyond what the annual *Crop and Livestock Report* is designed to reflect.

**Table 5. Overall Economic Effect of Both Counties Combined**

	<b>Output for Inyo &amp; Mono Counties Combined</b>			
	<b>Direct Output</b>	<b>Indirect Effects Output</b>	<b>Induced Effects Output</b>	<b>Total Output (Direct + Indirect + Induced)</b>
Livestock & Livestock Products	\$24,044,000	\$12,116,934	\$6,633,797	\$42,794,731
Field Crops	\$23,431,000	\$2,885,425	\$6,479,935	\$32,796,360
Nursery Products	\$1,620,000	\$95,015	\$387,473	\$2,102,488
Fruit & Nut Crops	\$241,800	\$17,735	\$75,674	\$335,209
Apiary Production	\$315,000	\$51,623	\$85,815	\$452,438
Vegetable Crops	\$45,000	\$3,736	\$11,698	\$60,435
Forest Products	\$34,400	\$1,681	\$9,250	\$45,331
<b>TOTALS:</b>	<b>\$49,731,200</b>	<b>\$15,172,151</b>	<b>\$13,683,642</b>	<b>\$78,586,992</b>

## 5. How do agriculture's economic contributions vary by land ownership type?

So far, we have shown agriculture's economic contributions from direct production and multiplier effects across major production categories. This section adds a new variable: land ownership.

As the *2015 Crop and Livestock Report* and other sources indicate, private land ownership is rare in Inyo and Mono Counties. Privately owned lands comprise only 1.7% of Inyo County and 6.5% of Mono. Thus, agricultural production depends to a large extent on leasing lands owned by other entities. This dependency, in turn, makes agriculture vulnerable to changes in leasing policies.

To better understand this phenomenon, this section examines the nexus of land ownership and agricultural production. The first part briefly describes major land ownership categories most relevant to agriculture. The second part estimates total economic contributions attributable to each land ownership type, including direct output and multiplier effects.

### Four Main Land Ownership Types

Based on publicly available data and on consultations with local experts, we focused on four major land ownership types. Although other land ownership types exist, most agriculture occurs under these four categories:

- Federal: U.S. Bureau of Land Management (BLM). Part of the U.S. Department of the Interior, the BLM manages 245 million acres of land in the United States, including 1.4 million Inyo County acres. The agency's multi-use mission combines energy development, livestock grazing, recreation, timber harvesting and other production types with protection of natural, cultural, and historical resources.
- Federal: U.S. Forest Service (USFS). Part of the U.S. Department of Agriculture, the USFS manages 193 million acres of land in the USA, including 776,000 in Inyo County. The agency works to sustain the health, diversity, and productivity of the nation's forests and grasslands for current and future generations. Like BLM, USFS leases many of its lands to private, for-profit businesses for grazing, logging, and other extractive purposes.
- City of Los Angeles, Department of Water and Power (LADWP). As a result of a long, complex, and contentious history, the City of Los Angeles has extensive holdings in Inyo and Mono Counties. LADWP uses these lands to supply water to Los Angeles via aqueducts. Total acreage varies across information sources. Based on county government sources such as General Plans and *Crop and Livestock Reports*, LADWP owns around 253,000 Inyo County acres (3.9% of the county) and 64,000 acres of Mono County (3.2% of the county), for a total of 317,000 acres.

At the time of writing, LADWP noted owning roughly 320,000 acres in Inyo and Mono Counties, with 240,000 of these acres leased to ranchers for grazing. Leased lands include 18,000 irrigated acres, 2,000 of them allocated for alfalfa production. On its website, LADWP notes that, “Grazing and recreation are compatible with watershed protection, and are an important part of a land management program that provides viable business opportunities while satisfying the goal of water quality protection” (see [www.LADWP.com](http://www.LADWP.com)).

- **Private Ownership.** As noted earlier, private land ownership is rare in Inyo and Mono Counties. At the time of writing, an estimated 121,200 Inyo County acres were in private ownership (1.9%), and 130,291 Mono County acres (6.5%). Private land occurs mostly in community areas. The low rates of private land ownership extend into agricultural production, making agriculture small and highly dependent on leasing lands from other owners.

Although most agriculture occurs within these four categories, two others warrant mention. First, the State of California owns land managed by its Department of Fish and Wildlife (DFW). Examples include the 991-acre Pickel Wildlife Area and the 1,400-acre East Walker River Wildlife Area, both in Mono County. DFW also owns the 181-acre Fish Slough Ecological Reserve near the Inyo-Mono border. Any occasional use of these lands by ranchers is for moving stock rather than grazing. The other exception is the County of Mono, which owns 770 acres.

### **Economic Effect Attributable to Each Land Ownership Type**

Now that we understand the major land ownership types under which agriculture occurs, we can determine the amount of economic output attributable to each land ownership type. We can also allocate output across common production categories. The following three figures show results for Inyo and Mono Counties individually, then combined.

**Table 6** shows Inyo County agriculture’s direct, indirect, and induced effects based on land ownership and use. It focuses on three main land uses: alfalfa hay, irrigated pasture, and rangeland pasture. Key findings include:

- **Ownership:** With 777,401 acres under agricultural production, BLM by far owns the most agricultural land (65%). Private ownership accounts for the smallest portion, with just 388 acres (3%).
- **Uses:** Of the 1,204,077 acres used for production, 98.7% of them (1,187,859 acres) are used as rangeland pasture. Only tiny portions go toward alfalfa hay (2,018 acres) and irrigated pasture (14,200 acres). LADWP owns virtually all of the irrigated pasture acres, the only exceptions being a few privately owned pastures too small to include in this level of analysis.

- Output. Including direct and multiplier effects, agricultural lands produced \$6.97 million across the three product categories. LADWP lands accounted for most of this output (68.6%), at \$4.8 million. Among the three land uses, alfalfa hay accounted for the most economic output (57.7% and \$4.0 million), even though less than one percent of the total acres were in alfalfa hay (0.17%).

**Table 6. Inyo County Economic Effect By Land Ownership & Use**

	Federal (BLM)	Federal (USFS)	City (L.A.)	Private Owner	TOTALS:
<b>Alfalfa Hay</b>					
# of Acres:	-	-	1,630	388	2,018
% of Total:	0%	0%	81%	19%	100%
Direct Value:	\$0	\$0	\$2,503,964	\$596,036	\$3,100,000
Indirect Value:	\$0	\$0	\$316,437	\$75,324	\$391,761
Induced Value:	\$0	\$0	\$432,049	\$102,844	\$534,893
<b>Total Value:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,252,451</b>	<b>\$774,203</b>	<b>\$4,026,654</b>
<b>Pasture (Irrigated)</b>					
# of Acres:	-	-	14,200	-	14,200
% of Total:	0%	0%	100%	0%	100%
Direct Value:	\$0	\$0	\$980,000	\$0	\$980,000
Indirect Value:	\$0	\$0	\$123,847	\$0	\$123,847
Induced Value:	\$0	\$0	\$169,095	\$0	\$169,095
<b>Total Value:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,272,942</b>	<b>\$0</b>	<b>\$1,272,942</b>
<b>Pasture (Rangeland)</b>					
# of Acres:	777,401	225,057	185,401	-	1,187,859
% of Total:	65%	19%	16%	0%	100%
Direct Value:	\$842,939	\$244,030	\$201,031	\$0	\$1,288,000
Indirect Value:	\$106,526	\$30,839	\$25,405	\$0	\$162,770
Induced Value:	\$145,446	\$42,106	\$34,687	\$0	\$222,239
<b>Total Value:</b>	<b>\$1,094,911</b>	<b>\$316,976</b>	<b>\$261,123</b>	<b>\$0</b>	<b>\$1,673,010</b>
<b>Total Values Across All 3 Uses</b>					
# of Acres:	777,401	225,057	201,231	388	1,204,077
% of Total:	65%	19%	17%	0.03%	100%
Direct Value:	\$842,939	\$244,030	\$3,684,995	\$596,036	\$5,368,000
Indirect Value:	\$106,526	\$30,839	\$465,689	\$75,324	\$678,378
Induced Value:	\$145,446	\$42,106	\$635,832	\$102,844	\$926,227
<b>GRAND TOTAL:</b>	<b>\$1,094,911</b>	<b>\$316,976</b>	<b>\$4,786,516</b>	<b>\$774,203</b>	<b>\$6,972,606</b>

**Table 7** shows Mono County agriculture’s direct, indirect, and induced effects based on land ownership and use. Key findings include:

- Ownership: With 503,205 and 545,556 acres in production respectively, BLM and USFS are the biggest two agricultural land owners. Private landowners and LADWP own the remaining 6%, in nearly equal proportions.
- Uses: Similar to Inyo County (above), the overwhelming majority of agricultural land is rangeland pasture. Rangelands account for 1,059,838 acres (95.6%) of the total 1,109,091 acres under production. Relatively small areas go toward alfalfa hay (9,200 acres) and irrigated pasture (40,053 acres).
- Output. Including direct and multiplier effects, agricultural lands accounted for \$20.9 million across the three production categories. At \$17.0 million, private lands accounted for the overwhelming majority of this total (81.4%), despite having just 32,267 acres in production. Similar to Inyo County, alfalfa hay accounted for more economic output (\$14.5 million and 69.5%) than irrigated pasture or rangeland pasture despite covering less than one percent of total area used for agriculture (0.83%).

**Table 8** combines the data for both counties. Key findings include:

- Ownership: With 1,280,606 and 770,613 acres in production respectively, BLM and USFS are the biggest two agricultural land owners by area (88.7%). LADWP is next with 9.9%, followed by private landowners at 1.4%.
- Uses: As was the case with each individual county, rangeland pasture accounts for the vast majority of agricultural acres. Rangelands cover 2,247,697 acres (97.2%) of the counties’ combined 2,313,168 acres under production. Relatively small areas go to irrigated pasture (54,253 acres, 2.3%) and alfalfa hay (11,218 acres, 0.5%).
- Output. Combining direct and multiplier effects across both counties, agricultural lands accounted for \$27.9 million across the three production categories. Despite only 32,655 acres in production, private lands accounted for the overwhelming majority of this total (\$17,794,611, 63.8%). Similar for each county individually, alfalfa hay accounted for more economic output (\$18,557,940 and 66.6%) than irrigated pasture or rangeland pasture, even though less than one percent of total acres were in alfalfa hay (0.5%).

**Table 7. Mono County Economic Effect By Land Ownership & Use**

	<b>Federal (BLM)</b>	<b>Federal (USFS)</b>	<b>City (L.A.)</b>	<b>Private Owner</b>	<b>TOTALS:</b>
<b>Alfalfa Hay</b>					
# of Acres:	-	-	-	9,200	9,200
% of Total:	0%	0%	0%	100%	100%
Direct Value:	\$0	\$0	\$0	\$10,120,000	\$10,120,000
Indirect Value:	\$0	\$0	\$0	\$1,234,497	\$1,234,497
Induced Value:	\$0	\$0	\$0	\$3,176,790	\$3,176,790
<b>Total Value:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,531,287</b>	<b>\$14,531,287</b>
<b>Pasture (Irrigated)</b>					
# of Acres:	4,509	5,977	6,500	23,067	40,053
% of Total:	11%	15%	16%	58%	100%
Direct Value:	\$338,853	\$449,174	\$488,478	\$1,733,495	\$3,010,000
Indirect Value:	\$41,335	\$54,793	\$59,587	\$211,462	\$367,177
Induced Value:	\$106,370	\$141,001	\$153,339	\$544,165	\$944,875
<b>Total Value:</b>	<b>\$486,559</b>	<b>\$644,968</b>	<b>\$701,404</b>	<b>\$2,489,122</b>	<b>\$4,322,053</b>
<b>Pasture (Rangeland)</b>					
# of Acres:	498,696	539,579	21,563	-	1,059,838
% of Total:	47%	51%	2%	0%	100%
Direct Value:	\$670,049	\$724,979	\$28,972	\$0	\$1,424,000
Indirect Value:	\$81,736	\$88,437	\$3,534	\$0	\$173,708
Induced Value:	\$210,336	\$227,580	\$9,095	\$0	\$447,011
<b>Total Value:</b>	<b>\$962,122</b>	<b>\$1,040,996</b>	<b>\$41,601</b>	<b>\$0</b>	<b>\$2,044,719</b>
<b>Total Values Across All 3 Uses</b>					
# of Acres:	503,205	545,556	28,063	32,267	1,109,091
% of Total:	45%	49%	3%	3%	100%
Direct Value:	\$1,008,902	\$1,174,153	\$517,450	\$11,853,495	\$14,554,000
Indirect Value:	\$123,072	\$143,230	\$63,122	\$1,445,959	\$1,775,382
Induced Value:	\$316,706	\$368,581	\$162,434	\$3,720,955	\$4,568,676
<b>GRAND TOTAL:</b>	<b>\$1,448,680</b>	<b>\$1,685,964</b>	<b>\$743,005</b>	<b>\$17,020,408</b>	<b>\$20,898,058</b>

**Table 8. Mono & Inyo Counties' Combined Economic Effect By Land Ownership & Use**

	<b>Federal (BLM)</b>	<b>Federal (USFS)</b>	<b>City (L.A.)</b>	<b>Private Owner</b>	<b>TOTALS:</b>
<b>Alfalfa Hay</b>					
# of Acres:	-	-	1,630	9,588	11,218
% of Total:	0%	0%	15%	85%	100%
Direct Value:	\$0	\$0	\$2,503,964	\$10,716,036	\$13,220,000
Indirect Value:	\$0	\$0	\$316,437	\$1,309,821	\$1,626,258
Induced Value:	\$0	\$0	\$432,049	\$3,279,633	\$3,711,682
<b>Total Value:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$3,252,451</b>	<b>\$15,305,490</b>	<b>\$18,557,940</b>
<b>Pasture (Irrigated)</b>					
# of Acres:	4,509	5,977	20,700	23,067	54,253
% of Total:	8%	11%	38%	43%	100%
Direct Value:	\$338,853	\$449,174	\$1,468,478	\$1,733,495	\$3,990,000
Indirect Value:	\$41,335	\$54,793	\$183,434	\$211,462	\$491,024
Induced Value:	\$106,370	\$141,001	\$322,434	\$544,165	\$1,113,970
<b>Total Value:</b>	<b>\$486,559</b>	<b>\$644,968</b>	<b>\$1,974,346</b>	<b>\$2,489,122</b>	<b>\$5,594,995</b>
<b>Pasture (Rangeland)</b>					
# of Acres:	1,276,097	764,636	206,964	-	2,247,697
% of Total:	57%	34%	9%	0%	100%
Direct Value:	\$1,512,988	\$969,009	\$230,003	\$0	\$2,712,000
Indirect Value:	\$188,262	\$119,276	\$28,939	\$0	\$336,478
Induced Value:	\$355,782	\$269,686	\$43,782	\$0	\$669,250
<b>Total Value:</b>	<b>\$2,057,032</b>	<b>\$1,357,972</b>	<b>\$302,724</b>	<b>\$0</b>	<b>\$3,717,728</b>
<b>Total Values Across All 3 Uses</b>					
# of Acres:	1,280,606	770,613	229,294	32,655	2,313,168
% of Total:	55%	33%	10%	1%	100%
Direct Value:	\$1,851,841	\$1,418,183	\$4,202,445	\$12,449,531	\$19,922,000
Indirect Value:	\$229,598	\$174,069	\$528,811	\$1,521,283	\$2,453,761
Induced Value:	\$462,152	\$410,687	\$798,265	\$3,823,798	\$5,494,903
<b>GRAND TOTAL:</b>	<b>\$2,543,591</b>	<b>\$2,002,940</b>	<b>\$5,529,521</b>	<b>\$17,794,611</b>	<b>\$27,870,664</b>

This long section has explored the nexus of land ownership, production type, and economic output. At the risk of oversimplifying the rich story told by more than 360 numbers, we offer the following four key findings:

1. Alfalfa hay is the most economically significant production use, by far. Alfalfa accounts for less than half a percent of all acres in production but contributes 66.6% of the total economic output.
2. The federal government owns the overwhelming majority of land used for agricultural production (88.7%), but these lands are nearly all low value rangeland that contribute just 16.3% of agriculture's overall economic output.
3. Private landowners do not own rangeland, but rather focus solely on higher value alfalfa and irrigated pasture. For this reason, private lands account for 63.5% of all economic output despite comprising just 1.4% of the agricultural land.
4. LADWP lands play a critical, disproportionate role in agricultural economic output. LADWP owns just 9.9% of agricultural acres but 19.8% of agriculture's direct and indirect economic output occurs there. Thus, any changes in LADWP leasing policies would have significant consequences for agricultural economic output.

## **6. What contributions does agriculture make through local employment and taxes?**

In addition to economic output, agriculture also contributes to the local economy through employment and taxes. How many jobs does agriculture directly and indirectly support? What effect does agriculture have on tax revenues?

The tables below detail employment. They include induced and indirect jobs, calculated using IMPLAN's employment multipliers which differ across counties and production sectors. For Inyo County (**Table 9**), agriculture supported 140 direct jobs plus an additional 65 from multiplier effects, for a total of 205 jobs. These numbers encompasses a wide range of production-related jobs, including not just growing and harvesting, but also sales, marketing and many other roles.

**Table 9. Employment Effect of Inyo County Agriculture**

<b>INYO Agricultural Employment</b>				
	<b>DIRECT Effects Employment</b>	<b>INDIRECT Effects Employment</b>	<b>INDUCED Effects Employment</b>	<b>TOTAL Employment Effect</b>
Livestock & Livestock Products	46	29	13	88
Field Crops	55	8	9	72
Nursery Products	4	1	3	9
Apiary Production	8	0	1	9
Fruit & Nut Crops	12	0	0	12
Vegetable Crops	14	0	0	15
	<b>140</b>	<b>38</b>	<b>27</b>	<b>205</b>

For Mono County (**Table 10**), agriculture supported 99 direct jobs and an additional 144 from multiplier effects, for a total of 244 jobs.

**Table 10. Employment Effect of Mono County Agriculture**

<b>MONO Agricultural Employment</b>				
	<b>DIRECT Effects Employment</b>	<b>INDIRECT Effects Employment</b>	<b>INDUCED Effects Employment</b>	<b>TOTAL Employment Effect</b>
Livestock & Livestock Products	4.8	38	41	84
Field Crops	73.5	23	43	139
Fruit & Nut Crops	0.7	0	0	1
Forest Products	20.0	0	0	20
	<b>99</b>	<b>60</b>	<b>84</b>	<b>244</b>

For both counties combined (**Table 11**), agriculture supported 239 direct jobs and an additional 210 from multiplier effects, for a total of 449 jobs.

**Table 11. Employment Effect of Inyo & Mono Counties Combined**

	COMBINED Agricultural Employment			
	DIRECT Effects Employment	INDIRECT Effects Employment	INDUCED Effects Employment	TOTAL Employment Effect
Livestock & Livestock Products	51	67	54	172
Field Crops	128	31	52	211
Nursery Products	4	1	3	9
Fruit & Nut Crops	13	0	1	13
Apiary Production	8	0	1	9
Vegetable Crops	14	0	0	15
Forest Products	20	0	0	20
<b>TOTALS:</b>	<b>239</b>	<b>99</b>	<b>111</b>	<b>449</b>

**Taxes**

Economic output has powerful implications for tax revenues. In general, the greater the economic output, the more money local, state, and federal governments have available to fund various public services. Using U.S. Bureau of Economic Analysis data as its foundation, IMPLAN calculates net taxes paid by individual sectors based on direct and multiplier output. **Table 12** shows estimated tax revenues attributable to Inyo County agriculture. With \$100,064 in State & Local taxes and \$1,586,167 in Federal taxes, Inyo agriculture accounted for a total of \$1,686,231 in tax payments.

**Table 12. Tax Base Effect of Inyo County Agriculture**

LOCAL & STATE TAXES PAID	by HOUSEHOLDS	by BUSINESSES	TOTAL
Social Security	\$7,296	\$14,741	\$22,037
Tax on Production and Imports		(\$399,181)	(\$399,181)
Personal Taxes	\$465,230		\$465,230
Corporate profits and dividends		\$11,978	\$11,978
<b>Total Local &amp; State</b>	<b>\$472,526</b>	<b>(\$372,462)</b>	<b>\$100,064</b>
FEDERAL TAXES PAID	by HOUSEHOLDS	by BUSINESSES	TOTAL
Social Security	\$471,634	\$168,697	\$640,331
Tax on Production and Imports		(\$56,278)	(\$56,278)
Personal Taxes	\$928,039		\$928,039
Corporate profits and dividends		\$74,075	\$74,075
<b>Total Federal</b>	<b>\$1,399,673</b>	<b>\$186,494</b>	<b>\$1,586,167</b>

**Table 12** introduces several tax concepts that might be new to some readers. For example, “Social Security” taxes are those that employees and employers make into the social insurance system. “Tax on Production and Imports” refers to property taxes, fees, tariffs, and other business taxes. “Personal Taxes” consist mostly of income tax. Please consult the authors for additional details.

**Table 13** shows estimated tax revenues attributable to Mono County agriculture. With \$1,234,008 in State & Local taxes and \$3,617,601 in Federal taxes, Mono agriculture accounted for a total of \$4,851,609 in tax payments.

**Table 13. Tax Base Effect of Mono County Agriculture**

<b>LOCAL &amp; STATE TAXES PAID</b>	<b>by HOUSEHOLDS</b>	<b>by BUSINESSES</b>	<b>TOTAL</b>
Social Security	\$5,293	\$10,694	\$15,987
Tax on Production and Imports		(\$101,661)	(\$101,661)
Personal Taxes	\$1,454,502		\$1,454,502
Corporate profits and dividends		(\$134,820)	(\$134,820)
<b>Total Local &amp; State</b>	<b>\$1,459,795</b>	<b>(\$225,787)</b>	<b>\$1,234,008</b>
<b>FEDERAL TAXES PAID</b>	<b>by HOUSEHOLDS</b>	<b>by BUSINESSES</b>	<b>TOTAL</b>
Social Security	\$1,425,460	\$199,722	\$1,625,182
Tax on Production and Imports		(\$6,736)	(\$6,736)
Personal Taxes	\$2,834,931		\$2,834,931
Corporate profits and dividends		(\$835,776)	(\$835,776)
<b>Total Federal</b>	<b>\$4,260,391</b>	<b>(\$642,790)</b>	<b>\$3,617,601</b>

**Table 14** shows estimated tax revenues attributable to Inyo and Mono agriculture combined. With \$1,147,816 in State & Local taxes and \$5,139,312 in Federal taxes, Inyo and Mono agriculture accounted for a total of \$6,287,128 in tax payments.

**Table 14. Tax Base Effect of Inyo & Mono Counties Combined**

<b>LOCAL &amp; STATE TAXES PAID</b>	<b>by HOUSEHOLDS</b>	<b>by BUSINESSES</b>	<b>TOTAL</b>
Social Security	\$15,985	\$32,297	\$48,282
Tax on Production and Imports		(\$554,129)	(\$554,129)
Personal Taxes	\$1,704,976		\$1,704,976
Corporate profits and dividends		(\$51,313)	(\$51,313)
<b>Total Local &amp; State</b>	<b>\$1,720,961</b>	<b>(\$573,145)</b>	<b>\$1,147,816</b>
<b>FEDERAL TAXES PAID</b>	<b>by HOUSEHOLDS</b>	<b>by BUSINESSES</b>	<b>TOTAL</b>
Social Security	\$1,699,506	\$445,265	\$2,144,771
Tax on Production and Imports		(\$55,762)	(\$55,762)
Personal Taxes	\$3,368,017		\$3,368,017
Corporate profits and dividends		(\$317,714)	(\$317,714)
<b>Total Federal</b>	<b>\$5,067,523</b>	<b>\$71,789</b>	<b>\$5,139,312</b>

## 7. What economic relationships exist within agriculture that straddle both counties?

Inyo and Mono Counties look separate on a map but their economies have invisible connections. Just as tourists, wildlife, and other things flow across the boundary, so too do economic goods and services. We are not aware of any rigorous attempts to document cross-county economic linkages involving agriculture. This section helps fill part of that knowledge gap and focuses on cattle grazing. We use two approaches: 1) a straightforward, linear analysis based on numbers of acres, level of inter-county livestock production, and their economic values; and 2) an integrated, input-output model of livestock-related connections between the two counties.

Why is this important? Cross-county interdependencies raise the stakes for any policy changes. What occurs in Mono can affect Inyo, and vice versa. Previous sections have shown the livestock industry's high dependency on leasing grazing lands from USFS and LADWP. If one of these entities pulls land out of production in one county, and that land was used by one of the region's 19 cross-border ranching operations, then it would create ripple effects in the other county. The operator might no longer move the herd to the other county, which in turn could create cascading effects of various kinds within and beyond the ranching industry. The rancher may incur greater costs for supplemental feed, straining already thin margins. Indeed, some ranchers have reduced herd size or even moved herds out of state due to limited availability of grazing lands. The key point is that pulling an acre of pasture out of production can affect operations in both counties and removes not just the value of not just the field crop, but also the livestock that depend on it.

### Linear Approach

Quantifying the economic value of cross-county interdependencies is not an exact science. One way to do it is to assume a straight, linear effect. Calculating the economic impact in this manner entails creating a long formula that combines 36 separate variables.

- The direct \$ value of economic output attributable to an acre of each of three kinds of field crops (alfalfa hay, irrigated pasture, rangeland), in each county (6 variables).
- the \$ value of two multiplier effect types (induced and indirect) attributable to an acre of each of three field crops (alfalfa hay, irrigated pasture, rangeland), in each county (12 variables).
- The per acre direct production value for the cattle from each county that depend on each of the three field crop types (alfalfa hay, irrigated pasture, rangeland) on that particular land, for at least part of the year, plus induced and indirect multiplier effects (18 variables).

The calculations are complicated and time-consuming, and performing them for every combination of crop and land ownership lies beyond our scope here. Nevertheless, they allow us to say things like the following:

- LADWP owns an estimated 1,630 acres of alfalfa in Inyo County. If LADWP were to remove part of that land from production, then it would create combined losses for the two counties totaling \$10,525 per acre removed from production. Inyo County agriculture would lose \$6,748 per acre in direct output plus \$3,776 in multiplier effects for a total of \$10,525 per acre. No losses would occur in Mono County, since cattle there do not normally use LADWP's alfalfa acres in Inyo County.
- LADWP owns an estimated 14,200 acres of irrigated pasture in Inyo County. If LADWP were to remove part of that land from production, then it would create combined losses for the two counties totaling \$1,657 per acre removed from production. Inyo County agriculture would lose \$767 per acre in direct output plus \$465 in multiplier effects for a total of \$1,232 per acre. Based on the extent to which Mono cattle depend on LADWP's irrigated pasture lands in Inyo, Mono County livestock production would lose \$226 per acre in direct output plus \$199 per acre in multiplier effects for a total loss of \$425 per acre of irrigated pasture removed from production.

### **Holistic Approach**

The section explores production of field crops as if each comprises its own micro-economy consisting of just one product with isolated effects. This section takes a more integrated approach. It analyzes "livestock production" as a whole rather than by its individual components like alfalfa, irrigated pasture, and rangeland. This process entails sophisticated modeling that accounts for complex economic interactions and effects.

Economists use the term "negative shock" to describe events like the significant reduction in livestock production that we model here. Such shocks can and do occur in a wide range of industries. They take many forms in agriculture. Examples include weather-related events such as droughts and floods, foodborne illness outbreaks, game-changing technological advances, influxes of lower cost imports, or major policy changes. These and many other events can create rapid, dramatic changes in economic output. For our purposes here, we focus on a reduction in livestock production due to fewer acres of grazing land available for ranchers to lease.

When such events occur, consequences ripple beyond the industry in which they originated. For example, a negative shock to pasture and livestock could make farmers and ranchers less able to make payments to their employees, suppliers, contractors, and lenders, who in turn, might pass those ripples onto others. This, in turn, can strain those other industries. The nature and extent of these complex effects depends on economic interdependencies and spillover effects across sectors.

Fortunately, IMPLAN's powerful software makes such modelling possible. In order to simulate a negative shock to Inyo and Mono grazing and livestock, we built an input-output model to represent their combined economy. The model includes 536 economic sectors from IMPLAN. To "shock" the system, we impacted the model with a \$1.0 million reduction in the value of economic output from livestock in each county, for a total of \$2.0 million. We put this "shock" into IMPLAN's sector #11 ("Beef cattle ranching..") then let it ripple through the other 535 economic sectors.

According to the model, a combined \$2.0 million shock to livestock production (e.g., through non-renewal of grazing leases) would cost \$3,381,060 (including direct, indirect and induced effects) in lost economic output and 17 jobs across various economic sectors within the two counties. It would also cost \$113,998 in lost tax revenues as affected industries such as retail, banking, insurance, and other sectors engage in slightly lower levels of taxable business activity.

The results scale in proportion to the shock. For example, if we simulate a \$10.0 million shock instead of just \$2.0 million, representing nearly 50% of the two counties' combined annual livestock production value, then the losses would rise to \$16,905,300 in output and 85 jobs, plus \$569,990 in foregone tax revenues.

Regardless which approach one uses, linear or holistic, economic connections between the two counties mean that what happens to agricultural lands in one will reverberate through the other as well.

## **8. What "ecosystem services" do agricultural lands provide to society?**

So far, we have discussed "market" values of Inyo and Mono County agricultural lands, i.e. goods and services that people can easily buy or sell. Agricultural lands also produce "non-market" services, i.e. things that we do not normally buy or sell but nevertheless have significant value. This section explores a category of non-market values called ecosystem services. It does three things: 1) introduce the concept and its overall use; 2) describe types of ecosystem services likely to occur on Inyo and Mono agricultural lands; 3) provide a suggested methodology for quantifying the dollar value of ecosystem services provided by Inyo and Mono agricultural lands. On the whole, section takes an initial step toward greater recognition of the myriad non-market economic contributions that agriculture makes to society.

### **Introduction to Ecosystem Services**

Several definitions exist but we focus here on the one used by the California Department of Food and Agriculture (CDFA), in particular its Environmental Farming Act Science Advisory Panel. CDFA defines ecosystem services as "the multiple benefits we gain from farming and ranching including crop and

livestock production.” This definition acknowledges that management decisions and conservation practices by farmers and ranchers provide open space, wildlife habitat, recreational opportunities, and many other benefits to society that often go uncounted.

Recognizing the importance of ecosystem services in agriculture, the U.S. Department of Agriculture (USDA) has launched multiple initiatives to elevate our understanding of these functions. These include designing and testing new markets for greenhouse gases, water quality, biodiversity, and habitats. A key priority (and Farm Bill requirement) is to create a system for quantifying, registering, and verifying environmental benefits produced by land management activities. USDA believes such a system could lead to multiple benefits, including becoming a new economic driver for rural America.

California is on the forefront of supporting and valuing ecosystem services on agricultural lands. In August 2011, the California Department of Food and Agriculture (CDFA) created the Environmental Farming Act Science Advisory Panel (EFA-SAP). The panel exists to document, study, recognize and incentivize environmental stewardship efforts on farms and ranches. For example, the panel has developed a Qualitative Assessment Model (QAM) to identify ecosystem services provided by various farming practices. The QAM illustrates the net environmental benefits from management practices implemented by growers and ranchers to enhance the environment. This in turn, can help CDFA educate a wide audience about net social, economic and environment benefits (and tradeoffs) of on-farm management practices.

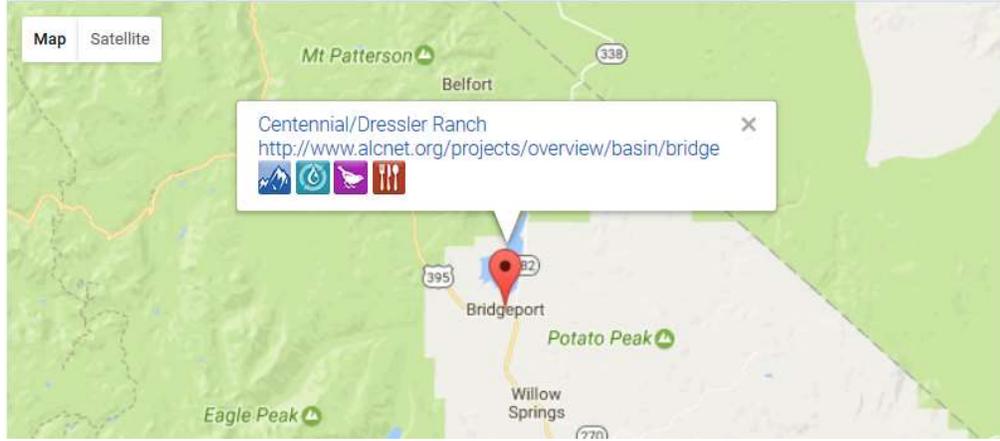
In 2013, CDFA announced what is believed to be the nation's first ecosystem services database for agriculture. The CDFA Ecosystem Services Database documents and communicates the many social and environmental benefits offered by growers and ranchers in California, including food production. One on hand, the new database helps CDFA discuss multiple benefits provided by California agriculture. On the other hand, it assists growers, ranchers and others who want to learn more about ecosystem services.

Information in the database comes from farm and ranch websites, growers who voluntarily enter their farm details via the website, and online case studies. Users can search the database by key word and categories as well as through the interactive map. The database then identifies different benefits from the farm management practices, such as, food, fiber, fuel, nutrient cycling and water quality for each farm. An interactive map allows users to view where the services are taking place throughout California.

At the time of writing, the database contained only one example from Inyo or Mono: the 6,350-acre Dressler Ranch (**Figure 2**). Located in Bridgeport Valley on the east slope of the Central Sierra Nevada, the historic Centennial/Dressler Ranch provides several ecosystem services, including wetland habitat and miles of riparian areas along waterways such as the East Walker River.

**Figure 2. Sample Ranch in the CSFA Ecosystem Services Database**

**ECOSYSTEM SERVICES DATABASE**



*NOTE: At the time of writing, CDFA’s Ecosystem Services database had 400 California farms but only one in Mono County and none in Inyo County. CDFA encourages growers and ranchers to visit the website, enter their farm details, and gain recognition for their ecosystem service SOURCE: <https://apps1.cdfa.ca.gov/EcosystemServices/>*

**Ecosystem Services in Inyo and Mono Counties Agriculture**

The discussion so far has provided a general overview of ecosystem services and how federal and state agencies support them. This section drills down to the deeper level. Based on CDFA's categories, it describes specific types of ecosystem services that agricultural lands provide in Inyo and Mono Counties.

**Figure 3. Ecosystem Services Provided by Inyo and Mono Counties’ Agricultural Lands**  
(figure continues on next page)

 <p><b>Wildlife Habitats</b> Provide habitats for resident and transient wildlife populations, especially with riparian areas and perennial vegetation.</p>	 <p><b>Biodiversity Conservation</b> Promoting a diversity of plants and animals can provide beauty, stability, disease prevention, and other benefits.</p>
 <p><b>Nutrient Cycling</b> Store, transform, and cycle important nutrients in the soil such as carbon, nitrogen and phosphorus.</p>	 <p><b>Recreation &amp; Cultural</b> Agricultural lands provide places for wildlife viewing, nature hikes, entertainment, education, and many other activities.</p>
 <p><b>Water Cycling</b> Unlike pavement, agricultural vegetation maintains soil moisture, enhances water storage, and reduces runoff.</p>	 <p><b>Food Production</b> Agricultural lands provide nutrients and energy to sustain a growing global population.</p>



### Fuel Production

Agricultural lands produce renewable energy, for example solar, wind, and biofuels.



### Pest Control

Agricultural lands provide habitat for raptors, beneficial insects, and other wildlife that help control pest populations.



### Soil Health

Well managed soils can sequester carbon, reduce erosion, prevent landslides, purify water, and deliver many other benefits.



### Pollination Services

Agricultural lands provide nesting habitat and floral resources for wild pollinators such as bees, bats, and birds.



### Atmosphere Regulation

Soils, crops and surrounding vegetation affect local temperatures and precipitation while also sequestering greenhouse gases.



### Water Quality

Well-managed agricultural lands can reduce salinity and organic/inorganic constituents in surface and ground water.

Each category contains many sub-elements. In a specific example, Inyo and Mono agricultural lands help with air quality by abating dust. Also, many of the categories above consist of multiple, smaller categories. The box below, for example, describes nine different kinds of "Recreation & Cultural" services that Inyo and Mono Counties agricultural lands provide.

### BOX: Specific Examples of "Recreation & Cultural" Ecosystem Services

- **Cultural Diversity.** Local agricultural diversity supports rich cultural diversity rooted in ranching, farming, and other cultures.
- **Spiritual and Religious Values.** Many residents have a profound relationship with the land that includes a powerful spiritual or religious component.
- **Educational Value.** Schools and local communities explore and study the county's agricultural landscapes, using them as living laboratories.
- **Local Historical Value.** Generations of growers and ranchers working the land have provided valuable local knowledge that is not written in books, but rather passed down.
- **Inspiration.** The county's striking agricultural landscapes provide a rich source of inspiration for art, folklore, architecture, music & advertising.
- **Recreation and Ecotourism.** Agricultural lands help support ranch stays, horseback riding, bike rides, and other leisure activities.
- **Aesthetic Values.** Beautiful agricultural landscapes provide critical "open space" for the community, even to the point of affecting where people decide to live.
- **Sense of Place.** Many residents value the "sense of place" associated with the county's striking landscape, including its beautiful agricultural lands.

## Assigning Dollar Values to Ecosystem Services

Economists have attempted with varying success to assign monetary values to benefits from ecosystem services. Studies have quantified the value of recreation, impact on property values, natural water filtration, aesthetic values and other many other benefits. The total value of all ecosystem services worldwide is estimated to surpass \$33 trillion per year.

This raises an important question: what is the annual dollar value of ecosystem services provided by agricultural lands in Inyo and Mono Counties? No one has yet attempted to answer this question. Collecting primary data on every ecosystem service type would require considerable time and effort. Fortunately, economists have developed a cost-effective approach that takes full advantage of existing research. Called the Benefit Transfer Methodology, the approach estimates economic values by transferring existing benefit estimates from studies already completed for another location or issue.

For example, if several studies have already quantified the per acre value of ecosystem services on cattle ranches in Nevada, Wyoming, Arizona, or elsewhere in California, then perhaps some findings may transfer to Inyo and Mono cattle ranches, given reasonable changes in the weightings based on differences among the cattle ranches.

Applying the Benefit Transfer Methodology in Inyo and Mono Counties would entail three steps. First, researchers would document types and amounts of ecosystem services provided by the county's agricultural lands. How much carbon sequestration takes place? How many tourists visit local farms and ranches? What's the dollar value of helping keep dust on the ground instead of blowing through the air? How many people attend farmers markets and related cultural events? This step entails counting acres, species, people, events, and other things. Some of this information may already exist in the offices of local non-profit organizations, university researchers, and government agencies.

The second step would entail reviewing existing literature to determine dollar amounts typically attributed to each ecosystem service. This requires locating and reviewing a large number of studies, perhaps as many as several hundred scholarly publications. It also involves screening each study for its relevance and quality, and determining how applicable they are to Inyo and Mono Counties. Several databases and software programs can help inform and validate estimates. Examples include InVEST ([www.naturalcapitalproject.org](http://www.naturalcapitalproject.org)) and ARIES ([www.ariesonline.org](http://www.ariesonline.org)).

The final step is to "localize" these values. This entails assigning dollar values to ecosystem services provided by the county's agricultural lands. Transferring the results of other studies to Inyo and Mono Counties requires making careful, systematic judgments regarding the relevance and credibility of

specific measures from other sites and studies. It's a rigorous approach using a decision-tree that considers the quality of the study site data and the correspondence between the study site and Inyo and Mono Counties. One must check each study for data issues, site correspondence issues, temporal issues, and spatial issues.

The bottom line is that the methodology combines complexity and rigor with feasibility and cost-effectiveness. In summary, to determine what the annual dollar value is of each of the ecosystem services provided by the county's agriculture would require a significant amount of resources. The cost may range from \$35,000 to \$50,000 for a desk study that utilizes existing methodology and literature (Benefit Transfer Methodology), or more than \$250,000 for a comprehensive study that generates primary data.

### **A Final Word on Ecosystem Services**

This section has described several aspects of ecosystem services on agricultural lands. The five main points are:

- USDA, CDFA, and other key agencies are providing tools, momentum, and high level support for valuation of ecosystem services.
- Agricultural lands in Inyo and Mono Counties provide several types of ecosystem services to society, all of which directly support human well-being. Many residents and visitors may take these benefits for granted and have never before seen them listed as they are here.
- All these ecosystem services make an extremely large economic contribution to Inyo and Mono Counties every year, but no one has yet attempted to quantify the total dollar value of this contribution.
- We have described a rigorous, cost-effective methodology for calculating the annual dollar value of ecosystem services provided by agricultural lands.

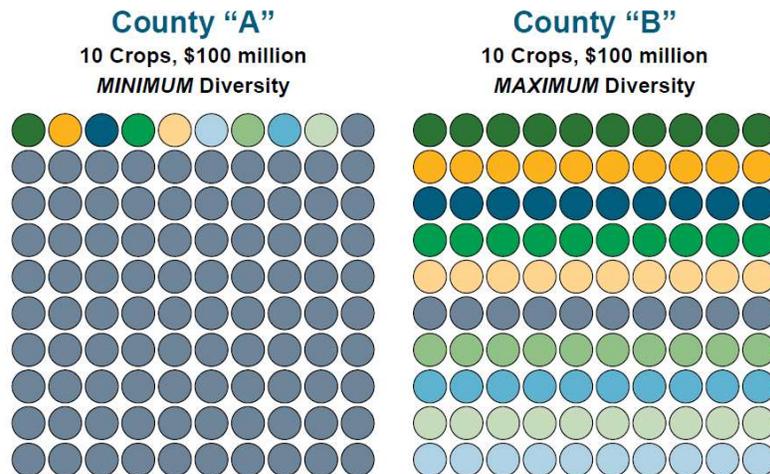
## **9. How economically diverse is agriculture?**

Economists disagree on things but there's one thing they all can agree on: a diverse economy is a resilient economy. Any region that depends on a large number of economic sectors reduces risk of catastrophic shocks. This important economic principle applies to agricultural diversity, too. For example, a county with just one or two main crops faces higher vulnerability to shocks in the form of price drops, disease outbreaks, new regulations, new competitors, spikes in the cost of key inputs, and other unpleasant surprises. Meanwhile, a county with a diverse agricultural industry can withstand shocks to certain crops without unraveling the entire agricultural economy. Bottom line: having "all your eggs in a single basket" is never a good idea, especially when it comes to something as economically important as agriculture.

Unfortunately, robust measures of Inyo and Mono Counties’ agricultural diversity do not exist, let alone the total economic value of such diversity. People see assorted crops growing in well-tended fields. They see cattle grazing and farmers markets overflowing with different kinds of food. But no one has attempted to quantify that diversity or its economic value. Part of the reason is that measuring diversity is a complex job. It requires more than just counting the different things for sale at the farmers market or listed in the annual *Crop and Livestock Report*. Measuring diversity includes the number of different crops grown as well as the assessing their economic *abundance* or *evenness*.

For example, imagine two California counties where the annual farm production value is \$100 million each. Both counties grow ten different kinds of crops. In County "A," a single crop contributes 91% of the revenue and the nine other crops make up 1% each (see **Figure 4** below). In County "B" the ten crop types all contribute equally, at 10% each. *Both counties have the same number of crops and total revenues, but County "B" has much higher economic diversity.* Thus, we could expect County "B" to be much more resilient to economic shocks than County "A".

**Figure 4. Agricultural Economic Diversity is More Than Just the Number of Crops**



Because economic diversity is so important, economists have developed sophisticated tools for measuring it. The most popular one is a summary statistic called the Shannon-Weaver Index. The index stems from the Shannon-Weaver entropy function, which was created in 1949 and is widely used in both ecology and economics. Economists and ecologists alike use the formula to calculate the Shannon-Weaver Index, which we share here and can explain further to interested readers:

$$SW_t^k = - \sum_{n=1}^k p_n * \ln (p_n)$$

The lowest possible index score is 0.00. Zero represents an extreme case where all economic output occurs in only one sector. In ecology, this would be a forest with only one species. In agriculture, it would be a county with just one commercial crop. The other extreme – an open system where potential diversity is unlimited – would have a much higher score. The higher the score, the greater the diversity.

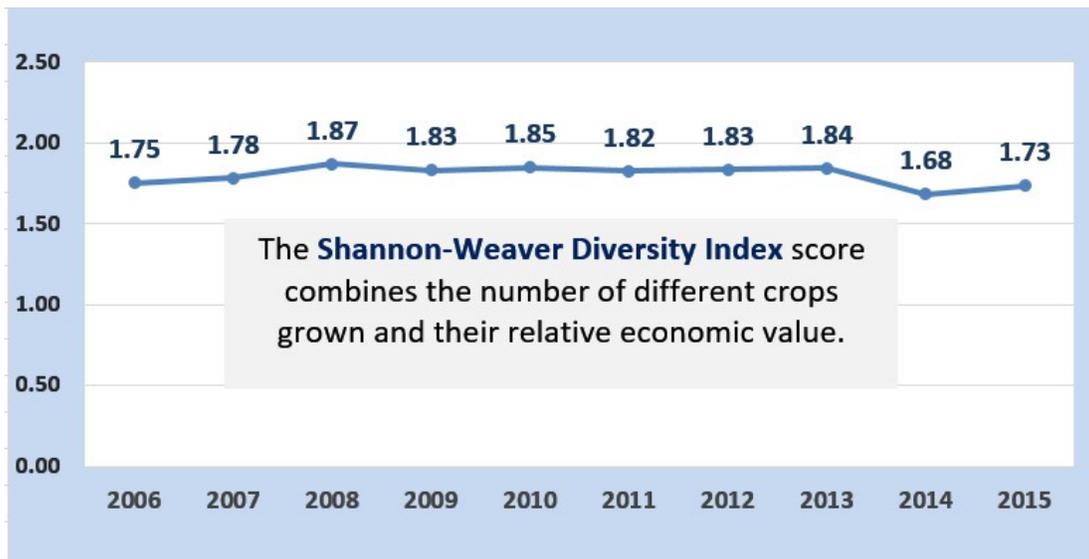
To measure agricultural diversity in Inyo and Mono Counties, we started by creating a list of specific products mentioned in the annual *Crop and Livestock Report*. We only used products for which production values were provided for the past decade, even though the total number of commercial products is certainly much larger. For example, we tracked alfalfa hay from its 2015 total (\$13.2 million) all the way back to 2006 (\$10.3 million), for each county individually as well as combined. Careful lumping and splitting resulted in 15 different categories consistently reported over the past decade. Next, we applied the list of products and their production values to the formula above. This resulted in a 2015 Shannon-Weaver Diversity Index score of **1.73**.

By itself, the index score says little. Where it comes in handy is making external and internal comparisons. Internally, the agricultural community can track the score over time to ensure that overall diversity is at the level stakeholders want. Maintaining high economic diversity in agriculture will minimize the risk of significant economic shocks. It's an insurance policy against economic earthquakes.

Speaking of earthquakes, note that formula above includes a logarithmic function (“ln”), similar to the Richter Scale for measuring earthquakes. Many Californians understand that a 7.4 earthquake releases twice the energy of a 7.2 earthquake even though the numbers are not far apart. The same principle applies to Shannon-Weaver Diversity Index scores: a tiny numeric difference represents a big change.

**Figure 5** shows how the Shannon-Weaver Diversity Index score has fluctuated over time. It has remained essentially flat over the ten-year period, starting and ending near the same general level (1.75 to 1.73). This suggests a generally stable level of economic diversity within agriculture. Note that the diversity index climbed slightly from 2008 to 2013 before returning to normal levels. This does not mean that more product types were being grown at that time, but rather that existing products balanced their respective pieces of the economic pie. We have calculated scores for several California counties and rarely see such a steady overall trend. Scores for many counties have dropped over time as a small number of crops gained economic prominence, for example strawberries in several coastal counties.

**Figure 5. How Economically Diverse is Agriculture in Inyo & Mono Counties?**



A discussion of the Shannon-Weaver Diversity Index should include caveats and limitations. Although this index provides a useful measure of the county’s agricultural diversity over time, comparisons to other counties are problematic due to different methods of reporting. Counties vary in the level of detail with which they report their agricultural products. The more economically important an agricultural product is, the greater detail with which counties tend to report it. For example, Inyo and Mono Counties lump wine grapes with other products in a single “Miscellaneous” Fruit & Nut Crops category. Major wine-producing counties such as Napa and Sonoma, however, specify production values across several different wine grape types, which raises their diversity score.

Caveats aside, the key points combine good news with not so good news. The 1.73 score is low compared to others we have seen. This means that compared to other California counties, Inyo and Mono agriculture faces high vulnerability to economic “shocks” such as those discussed earlier. On the upside, the score has remained stable over the past decade, with no sign of decline.

## **10. What options exist to add economic value to local agricultural production?**

As Section #9 detailed, Inyo and Mono agriculture has low economic diversity, which puts the agricultural economy at risk. Droughts, recessions, and other “shocks” may inflict even worse damage than they otherwise would. Any efforts to strengthen agriculture through economic diversification could help address this challenge.

Local policy makers, agricultural producers, and other stakeholders have long expressed interest in economic diversification. Even the Mono County General Plan lists a strong and diverse economy as a top strategic direction. Mono's latest economic development strategy also calls for diversifying the economy and creating a regional food system (see [www.monocounty.ca.gov](http://www.monocounty.ca.gov)). These mandates underscore the region's commitment to addressing this vulnerability.

Despite longstanding interest and high-level mandates, little agricultural diversification has occurred. Stakeholders understand the need to diversify and the exciting opportunities it presents, but conditions on the ground have not changed. Reasons vary but a lack of knowledge could be part of the problem. Few stakeholders probably know the range of diversification options already discussed and attempted in Inyo and Mono. Even fewer stakeholders might grasp the rich diversity of proven options that ranchers and farmers in other locations have developed. In short, the current state of knowledge about diversification opportunities is anecdotal and scattered.

This section takes a step toward filling that knowledge gap and consists of three components. First, we provide background on agricultural diversification, including a typology of five main strategies. Second, we describe 21 tactics within the five broad diversification strategies – specific approaches that farmers and ranchers have successfully used. Third, where relevant we include discussion of how various tactics apply in the Inyo and Mono context. We hope the content provides a common framework and jumping off point for future discussions by local farmers, ranchers, non-profit staff, agency staff, and others interested in economic strength through diversification.

## **Background and Conceptual Framework**

Methods: Developing this section consisted of three main methods. First, we consulted local experts from a range of public and private sector organizations. The experts represent decades of experience and deep knowledge of agriculture's past, present, and potential future. Second, we reviewed the relevant academic and gray literature. Gray literature included annual reports, evaluations, business plans, white papers, websites, government policies, and a local beef feasibility study. Within the vast academic literature, we focused mostly on agricultural diversification studies. Hundreds of publications have documented challenges faced by farms and ranches in the U.S. West and beyond, and have explored economic diversification as a potential solution. We found more than thirty articles just on **Tactic #1** below, diversification of **grazing systems**. If we could pick just one article for stakeholders to read, it would be a 2012 piece by Sayre *et al.* titled, "The Role of Rangelands in Diversified Farming Systems: Innovations, Obstacles, and Opportunities in the USA." We consider this review article to be the definitive piece on agricultural diversification. It emphasizes ranching but applies to farms, too. Our typology of strategies and tactics stems mostly from this article, as do many of the examples. We adjusted their typology in various places but kept it mostly intact.

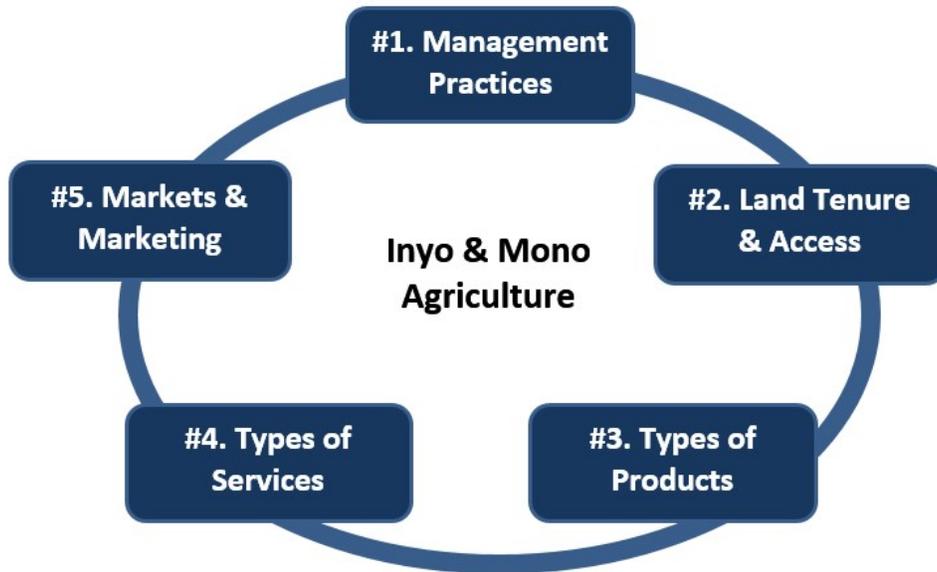
Finally, we drew from our extensive professional experience with this topic. This includes, for example, economic studies we have completed for several California counties. The studies all included a section on “locally sourced, value-added food processing.” For each study, we calculated the direct economic output from a county’s food processing activities, as well as employment and multiplier effects. These analyses covered diverse production types, from boutique wineries in San Diego County, to sheep and lamb processing in Solano County, to triple-washed leafy greens in Monterey County.

Our experience extends far beyond California. One co-author (Jeff) has visited ranches across the U.S. West and in over a dozen countries to document economic diversification strategies. From Kansas to Kenya, California to Costa Rica, Nebraska to Namibia, he has identified over 24 alternative revenue streams that ranchers have developed. Many of these do not appear in any published literature.

Three caveats are in order. First, this does not pretend to be an exhaustive discussion. We mention current diversification examples from Inyo and Mono but the list is not complete. The same applies to examples in the U.S. and beyond. Farmers and ranchers try new things all the time and we cannot possibly know about every project. We welcome additions to the list. Second, a rigorous analysis of local diversification opportunities lies well beyond our scope here. By design, we do not rate or rank the options, perform feasibility tests, or even make detailed recommendations. Instead, we provide the menu of diversification options for local stakeholders to consider, with a few general recommendations at the end.

**Figure 6** shows the five main agricultural diversification strategies based on the Sayre *et al.* 2012 article mentioned above. These major categories provide a useful framework. We liken them to the annual *Crop and Livestock Reports* that California counties produce each year. Those reports tend to lump dozens of agricultural products into the same five or six major categories such as Fruit & Nut Crops, Vegetable Crops, Animal Products, Nursery Products, Field Crops, and so on. Doing so provides a valuable structure, common language, and shared understanding. The same principle applies here. The following five sections go through each strategy in turn.

**Figure 6. Five Major Strategies for Agricultural Diversification**



*Source: adapted from Sayre et al. 2012. "The Role of Rangelands in Diversified Farming Systems: Innovations, Obstacles, and Opportunities in the USA." Ecology and Society 17(4): 43.*

#### **STRATEGY #1. Diversification through innovative management practices.**

Focused on ranching, this strategy entails adjusting the timing, frequency, and intensity with which livestock eat, as well as the grazing location. It takes many forms in the U.S. but the various approaches tend to have a few things in common. For example, the new management approach may emphasize reducing operating costs for purchased inputs, human labor and other factors. A second common theme entails improving rangeland productivity by restoring riparian and other damaged areas. Finally, many ranchers innovate around environmental sustainability practices that generate additional income, for example ones that increase ecosystem services (Section #8) in ways that augment direct income.

- **Tactic #1 – Grazing systems.** Ranchers move livestock around on a regular basis depending on myriad factors. Recent innovations, however, have taken movement patterns to a new level of sophistication and effectiveness. Thousands of ranchers in the U.S. and far beyond now use an approach called Holistic Management (see [www.holisticmanagement.org](http://www.holisticmanagement.org)). Also known by various other names such as regenerative agriculture and planned grazing, the concept entails grazing cattle in ways that mimic natural processes. In particular, this type of grazing mimics herds of bison, elk, wildebeest, and other wildlife that created and maintained the world's grasslands for millennia. The idea is to have dense livestock herds that move quickly from one area to the next. Animals bunch

close together, mimicking protection from predators, for example bison defending themselves from wolves or wildebeest surrounded by lions. Stocking rates run four times denser than what California ranchers typically use, with significant financial implications.

According to chief proponent Alan Savory and many scientific studies, the short duration, intensive grazing approach can increase ground cover, improve water retention, enhance soil organic matter, replenish streams, and protect biodiversity, all while increasing ranch revenues. Savory's 2013 TED talk "How to Fight Desertification and Reverse Climate Change" lays out his approach and has 3.9 million views. It is well worth the 22 minutes.

Not surprisingly, several skeptics have called Savory's bold claims into question. Only time and additional empirical studies will determine which way the scientific consensus leans. Meanwhile, our direct experience stems from time spent at three California ranches that practice holistic management: the 4,000-acre Dorrance Ranch, the 10,000-acre Paicines Ranch ([www.paicinesranch.org](http://www.paicinesranch.org)), and the 20,000-acre Santa Lucia Preserve ([www.slconservany.org](http://www.slconservany.org)). To a lesser extent, we have also observed it at the 50,000-acre Segera Ranch in Kenya ([www.segera.com](http://www.segera.com)).

On the upside, we witnessed this grazing approach restore heavily degraded lands back to productivity. It was especially striking to see ranches with clumps of deep rooted, perennial grasses that stayed lush and green throughout California's recent drought while nearby annual grasses turned brown. Results like this have significant cost saving implications for Inyo and Mono ranchers who cut hay and supplemental feed part of the year. On the downside, the frequent movement of herds and their electric fencing requires extra labor and planning. It also takes time, effort, and patience to train the cattle when and where to move.

- **Tactic #2 – Multispecies grazing.** Many ranchers have diversified the types of species they stock. Instead of just cattle, they add goats, sheep, and other livestock. Mixing browsers with grazers diversifies herbivory impacts and tends to mimic natural, ecological processes. Joel Salatin's "Polyface" system offers a prominent example of this mix-species approach (see [www.polyfacefarms.com](http://www.polyfacefarms.com)).

Sheep sound fine in theory but can cause serious concerns locally. Mono sheep and lambs accounted for \$2.1 million in value for 2015 but face new restrictions on grazing opportunities that could limit production after 2017. After careful deliberation, the Mono County Board of Supervisors voted in March 2017 to terminate domestic sheep grazing on the county's Conway Ranch property. The decision came based on ample scientific evidence that the domesticated sheep could transmit pneumonia to endangered Sierra Nevada bighorn sheep located in and around nearby Lundy Canyon.

- **Tactic #3 – Matching livestock numbers and needs to variable forage conditions.** Although ranchers constantly adjust herd sizes and movements, this tactic entails more rigorous matching of herd size and the timing of grazing with forage quantity and quality. Forage quality varies widely across locations and years. With this approach, ranchers track the nutritional quality of rangeland then adjust stocking accordingly. The goal is to ramp grazing demand to match peak nutritional availability then dial it back down as the peak ebbs. In short, this tactic is a more concerted approach to the forage balancing act that ranchers already do. Many ranchers are subscribe to “Herd Quitter,” a popular newsletter on the topic by rancher Kit Pharo (see [www.pharocattle.com](http://www.pharocattle.com)).

## **STRATEGY #2. Diversification of land access and tenure arrangements.**

This strategy entails diversifying beyond simple fee ownership of land, embracing a wide range of land rights that create flexibility and stability. Ranchers in the western U.S. rarely own enough land to support their herds throughout the year and that is especially the case in Inyo and Mono. As Section #5 noted, private ownership accounts for just 1.9% of all Inyo County acres 6.5% of Mono. By necessity, local ranchers rely on multiple tenure arrangements that combine public and private lands, ownership and leases. These allow them to use different elevations and vegetation types according to seasons and weather patterns. Although ranchers already use tenure diversity to a certain extent, others options exist.

- **Tactic #4 – Conservation easements.** A conservation easement is a voluntary agreement between a landowner and a qualified land trust, conservation group or government agency regarding the future uses of private property. A rancher or farmer who grants a conservation easement gives up development rights but keeps full ownership of the property as well as rights to live there, produce crops and livestock, and other activities. Among other things, locking up the development rights lowers the appraised value of the property, creating significant property tax benefits for the landowner. Thousands of farmers and ranchers in California and elsewhere have secured conservation easements through the Rangeland Trust ([www.rangelandtrust.org](http://www.rangelandtrust.org)) and many other organizations, including ones specializing in Agricultural Conservation Easements (ACE) for farmlands. In Mono County, the 6,350-acre Centennial / Dressler Ranch featured in Section 9 (**Figure 2**) provides an example of a local ranch under a conservation easement.
- **Tactic #5 – Shared or common property regimes.** Popular overseas, common property regimes have existed for centuries but U.S. ranchers have not used them much. That is changing somewhat as more ranchers band together for the common good. Sayre *et al.* describe an association of 40 ranchers that jointly leases grazing allotments on federal lands. They run their stock together, using less labor than what they would need to do so individually. When the grazing season ends, they sort the cattle move them home or to other pastures.

For more than a century, a group of Wyoming ranchers has jointly moved its cattle 58 miles from spring pasture on the desert to summer pasture in the forest. The collaborative approach by the Upper Green River Cattle Association ranchers allows them to move cattle across lands under a range of jurisdictions, including lands owned by BLM, National Forest Service, State of Wyoming, and private landowners (see [www.greenriverdrift.org](http://www.greenriverdrift.org)).

- **Tactic #6 – Grassbanks.** A grassbank is an area of rangeland set aside by a public agency or conservation organization that ranchers can use under certain conditions. Just as a bank might lend money, a grassbank “lends” forage to ranchers. They do so at below market rates in exchange for ranchers agreeing to support certain conservation practices on their own properties. The Nature Conservancy pioneered the concept in 2002 on its 60,000-acre Matador Ranch in Montana. Local ranchers pay discounted fees to graze cattle on the Matador. In return, they implement wildlife-friendly practices on their own operations. As ranchers implement more conservation practices at home, their cost to lease the Matador grazing lands drops proportionally.
- **Tactic #7 – Ownership partnership.** This tactic entails a farmer or rancher engaging an organizational partner in ownership of the property. Common partners include government agencies at the federal, state, or local level, tribal authorities, and colleges or universities. The key advantage is that an ownership partner can bring significant financial, intellectual, and other resources that help reduce the rancher’s costs and strengthen revenues. Ranchers and farmers continue to live on the land, producing livestock and crops as they always have. But they incur fewer costs for upkeep, taxes, and other common expenses. They also enjoy greater opportunities through research, education, and other compatible activities that the partner organization implements on-site.

### **STRATEGY #3. Diversification of products.**

This strategy consists of farmers and ranchers resisting long-term trends and market pressures that favor sale of a single commodity of uniform size, shape, color. Instead, they produce a diverse range of plant and animal products.

- **Tactic #8 – Mixed or minor breed cattle and crops.** Rather than produce genetically similar calves destined for feedlots, as most U.S. rangeland ranching does, this tactic uses mixed or minor breed cattle such as Murray Gray, Belted Galloway, and Laola. Ranchers in the American Criollo Beef Association, for example, produce the hardy, desert-adapted Criollo breed of cattle, which is originally from Andalusia, Spain and first brought New World by Christopher Columbus (see [www.leanandtenderbeef.com](http://www.leanandtenderbeef.com)). Ranchers also create locally adapted herds of conventional breeds,

for example by culling for smaller animals that fare better with limited forage or during droughts. Overseas, we have seen this with Nguni cattle in Swaziland and other southern Africa countries, a local breed resistant to drought and disease.

In crop production, many farmers have shifted to heirloom and other traditional varieties that appeal to consumers who prefer a more traditional, often tastier, product. In Inyo County, the Bishop Paiute Tribe has been encouraging members to save traditional plant seeds that help preserve culture and could fill future niche markets.

- **Tactic #9 – Multiple livestock species.** This tactic moves beyond traditional livestock such as cattle, goats, and sheep (Tactic #2) to include many exotic ones. Ranchers and farmers add hogs, bison, chickens, and others, in some cases herds of bison and elk. Under certain circumstances, these unusual products can increase incomes, sustain ecological resources, and reduce risk.

For example, a report we recently completed on the economics of Solano County agriculture noted a boutique goat farm that produces a wide range of cosmetics made from goat milk. The product line started with goat milk soap. Over the years, it has grown to include other goat milk products such as bath powders, body butters, salves, and lotions. Two other ranches produce and sell their own alpaca fiber, yarn, roving, and related products from alpacas. We have seen ostrich farms in California and southern Africa, and even a 400-acre Costa Rica ranch that produces large, tree-climbing iguanas for local restaurants and direct consumer sales.

- **Tactic #10 – Breeding stock.** This tactic entails ranchers entering the market earlier in the animal lifecycle by selling breeding stock to other producers. Pharo Cattle Company, for example, has North America's largest selection of grass-based genetics. Semen from these animals can help ranchers reduce frame size, increase thickness, and improve calving ease, which in turn lower costs and increase profits (see [www.pharocattle.com](http://www.pharocattle.com)). An emphasis on breeding creates interesting hybridization opportunities. For example, the owners of Matheson Farms have crossed a bull from their Himalayan yak herd with a beef cow and now sell individually wrapped cuts of Yak Beef and ground Yak Beef (see [www.mathesonfarms.com](http://www.mathesonfarms.com)).
- **Tactic #11 – Value-added animal products.** Few ranchers finish their own animals, but those who do can diversify into value-added animal products such as meat, pet food, bacon, and sausage. For example, the Sun Ranch north of San Francisco cuts, wraps, and sells a vast array of beef, poultry, pork, products, including specialty items such as pepperoni, jerky, and uncured hot dogs (see [www.marinsunfarms.com](http://www.marinsunfarms.com)). In Inyo and Mono, a few small, local markets will process meat for 4-H and FFA animals but no significant, commercial processing occurs. The Environmental Health Department confirmed that no meat processors are currently registered and permitted.

Local meat processing is an especially promising area for Inyo and Mono. Ranchers currently send cattle to Harris Ranch in the Central Valley or to the Walker River Meat Processing plant in Yerrington, Nevada. Many sales, if not most, now occur via video auction. As one local expert told us, “Our livestock go everywhere but here...”

In 2009, Inyo County commissioned a study to explore the feasibility of local meat processing. The resulting “Natural Livestock Feasibility Study” by Jeff Schahczenski is available online in PDF (see: <https://attra.ncat.org/attra-pub/summaries/summary.php?pub=202>). Despite the small sample size of just ten ranchers, the study offers interesting insights into capturing greater value through new products and markets, especially through sale of grass-fed, natural, and organic beef. For example, ranchers surveyed for the study preferred slaughtering services over marketing assistance. They also preferred a stationary processing facility over a mobile one. The 21 merchants that completed a survey indicated a preference for local meat products. A large ski resort in Mammoth, for example, expressed desire to purchase all local beef. It was unclear, however, if the price local merchants were willing to pay would justify the costs of a processing facility. A mobile facility could cost \$250,000, a stationary one \$300,000 to \$1.5 million. Overall, the study concluded that an initiative focusing on local, sustainable meat processing was not feasible at that time, but future research and educational efforts could change that.

- **Tactic #12 – Value-added plant products.** Farmers in many parts of California and elsewhere have ample experience adding value to their raw plant products. Our economic analysis of agriculture in other California counties has documented a wide range of value-added products. Popular examples include baked goods, jams, jellies, trail mix blends, fruit and nut gift baskets, walnut oil, olive oil, popsicles, dog treats, salsas, “craft” beers brewed with local hops, and many others. A few growers even sell stevia and cactus products.

Similar to meat processing, hardly any processing of local fruits, vegetables, and other plant products occurs in Inyo and Mono. We located only minor, small-scale operations. For example, a producer near Death Valley packages and sells dates through retail outlets. The area’s honey producer does his own packaging and sells retail, but on a small scale. One grower produces hops, some of which supply the region’s micro-breweries. Regarding beer, the annual June Lake Autumn Beer Festival hosts breweries and visitors from across California, reinforcing the economic role that local, craft brewing can play.

Despite the dearth of local food processing, significant potential certainly exists. In fact, nearly every crop listed in the Inyo and Mono annual *Crop and Livestock Report* has value-added potential. In other California counties, we have seen examples of local producers adding value to crops listed for

Inyo and Mono, in particular: almonds, apples, apricots, blackberries, cherries, figs, grapes, nectarines, peaches, pears, pecans, persimmons, plums, pomegranates, raspberries, strawberries, walnuts, garlic, herbs, leafy greens, pumpkins, sweet corn, tomatillos, and tomatoes.

We have even seen value-added to field crops. For example, many Central Valley growers compress hay into pellets for export to lucrative international markets, mostly Asia. Despite the potential profits, we do not recommend this for Inyo and Mono because of the already constrained hay supply. Shipping it overseas could create serious consequences for ranchers whose livestock depend on local hay.

Two crops likely present the biggest opportunity: wine grapes and cannabis. To our knowledge, the region has just one significant wine grape producer and several smaller, hobby-scale vineyards. The larger producer sells wine at a local bakery, whereas the hobbyists consume or share what they produce. Thanks to new varieties and other factors, wine grapes and wineries have expanded rapidly across California and the U.S., often into areas where no one thought wine production possible. Thus, the fact that local winemaking now occurs in Inyo and Mono bodes well, despite its current small size.

Economic studies we have done for other counties indicate that when it comes to locally sourced, value-added food processing, wineries offer an especially common and fruitful path. They create significant, direct economic output with high employment and multiplier effects. San Diego County wineries, for example, converted just \$4.3 million worth of wine grapes into \$70.4 million in direct winery output plus another \$49.5 million in multiplier effects. In Contra Costa County, wineries converted \$10.3 in grape production into \$34.5 million in direct winery output, or \$50.2 million including multiplier effects. Dramatic results like these occur in county after county. Part of wineries' economic value includes hosting wine tastings, weddings, and other events. Even a small wine industry in the Eastern Sierras could create large, lasting impacts.

Cannabis cultivation is poised to explode in California as new policies take effect. Now that Californians voted to legalize recreational marijuana use, growers across the state are considering entering this market due to high potential profitability. No one can predict how this will play out. We are concerned that euphoria and optimism are running so high, and production ramping so fast, that it could overshoot demand, adversely affecting smaller producers. We also have concern about a "substitution effect" whereby a large-scale shift into cannabis cultivation results in farmers growing less food due to the lower profit margins of typical food crops. This, in turn, could tighten supply and raise food prices. On the upside, a local expert in Inyo County expressed hope that profitable cannabis cultivation might motivate Inyo and Mono's aging farmers to defer retirement a while longer. It could also provide enough revenue to younger, small-sized producers that they can more comfortably afford to grow lower margin, higher nutrition food crops.

Despite these concerns, the sheer magnitude of the economic opportunity makes it hard to resist. The market for concentrates, edibles, drinkables, and other cannabis-infused products certainly creates an interesting opportunity for Inyo and Mono. Both counties voted strongly in favor of legalization, so overall receptivity is high. Only time will tell if cannabis creates net positive effects for Inyo and Mono. In the meantime, a detailed feasibility study, combined with relevant analysis of policy alternatives, could help steer the cannabis juggernaut in a positive direction.

- **Tactic #13 – Nonagricultural products.** A growing number of ranchers have diversified into energy production, mining, photos, and other non-agricultural products that provide significant, supplemental revenue. We have seen oil and gas wells, wind turbines, and other infrastructure situated in ways that seem compatible with livestock ranching and crop farming. One of the ranches mentioned in **Tactic #1** generates supplemental revenue from a telecommunications tower located high atop the ranch. Farms and ranches with agritourism enterprises (see **Tactic #14** below) also sell photos and other merchandise. A few of Inyo and Mono’s iconic ranches have appeared in film productions, and Mono County even has a film commission to facilitate such efforts.

#### **STRATEGY #4. Diversification of services.**

- **Tactic #14 – Agricultural tourism and recreation.** Farmers and ranchers can diversify revenue streams through hosting visitors who come for a wide range of experiences such as hiking, birdwatching, and other recreational activities. Western ranches, for example, offer ‘dude ranch’ experiences where visitors pay to ride horses and experience the traditional ranching lifestyle. A prominent Mono County example is Humewill Ranch. Guests at this sixth-generation Bridgeport property can ride horses for pleasure or assist with cattle work such as moving cows and calves to fresh grass, sorting cattle from a herd, or loading calves into a trailer as a timed event. Other ranches offer guided fishing, birdwatching, and natural history tours.

Many farms host weddings, picnics, and various catered events, while also offering U-pick and other farm activities. We heard interest in moving beyond the traditional “pumpkin patch and apple cider” experience into “working farms” that act more like dude ranches. Overall, agritourism on ranches and farms represents a natural and promising growth area for Inyo and Mono Counties. It can help preserve local ranches and ranching culture, create economic synergies with the region’s already strong tourism industry, and help diversify both the agriculture and tourism industries.

- **Tactic #15 – Hunting and fishing.** Whether informal or formal, commercial or subsistence, ranchers and farmers can generate supplemental revenue from aquatic and terrestrial wildlife. Hunting tends to be compatible with livestock ranching and provides an incentive to manage for wildlife habitat.

Many ranchers and farmers hunt wildlife for their own table but a growing number charge hunters fees based on time (i.e., daily, seasonal, annual access) or receive payments from an outfitter or broker for access. State laws and game agencies regulate hunting of wild game. Most laws treat exotic game species as if they are livestock (e.g., oryx, wildebeest, bongo, impala, eland, kudu), which gives owners greater control over the timing and extent of harvest.

In early 2017, we analyzed the economics of bird hunting (mostly pheasant and chukar) in part of the Sacramento - San Joaquin River Delta and determined that hunting had a 0.74 multiplier on economic output. In other words, every dollar that hunting brought into the local economy also added an extra 74 cents to the local economy through supplier purchases and consumer spending. Similar effects could occur in Inyo and Mono.

- **Tactic #16 – Ecosystem services.** The non-market economic contributions that ranchers and farmers make through ecosystem services, as detailed in Section #8, sometimes result in revenue. Several examples exist of operators receiving payments for providing habitat for wildlife, pollinators and plants. Others receive payments for carbon storage and sequestration. Still others earn payments for ecological restoration work. Finally, some generate revenue from cultural preservation activities. The U.S. Department of Agriculture implements many of these incentive and financial assistance programs, especially through its Natural Resources Conservation Service. Instead of cash payments, some programs offer technical assistance and cost sharing for conservation projects.
- **Tactic #17 – Miscellaneous Other Services.** The Sayre *et al.* 2012 article lists several other tactics, which we combine here into a miscellaneous section. Examples include “horse boarding,” “Education and research,” and “Control of fire risk and invasive weeds.” “Services for other ranchers” includes consulting, monitoring, video production and training facilities for horses and cows. We encourage interested readers to consult the article for further details.

## **STRATEGY #5. Diversification of markets and marketing**

Whereas the previous strategy focused on creating new value, this one focuses on capturing value. It does this through new, alternative markets and conservation-friendly production practices. When a customer spends a dollar on food, the overwhelming majority of that dollar goes to processing, distribution, and marketing. This strategy helps producers increase their share of that food dollar.

- **Tactic #18 – Third party certification and marketing.** Many third-party certification and marketing systems now exist to help ranchers and farmers capture price premiums from niche markets. Prominent examples include American Grassfed ([www.americangrassfed.org](http://www.americangrassfed.org)), and Certified Humane ([www.certifiedhumane.org](http://www.certifiedhumane.org)), as well as wildlife-friendly and predator-friendly certifications. The U.S. Department of Agriculture has certified over 2 million acres of rangeland and pasturelands as

certified organic, as well as over 15 million poultry and half a million head of cows, hogs, and sheep. Inyo and Mono seem to have negligible organic production, if any at all. Annual *Crop and Livestock Reports* do not specify certified organic crop types or acreages.

- **Tactic #19 – Cooperatives and producer marketing boards.** Alternative marketing arrangements can benefit small-scale producers, for example through capturing more down-stream value, maintaining ownership of new technologies, and having more marketing power than they could generate individually. This can include accessing niche markets. The Oregon-based Country Natural Beef cooperative, for example, enables 120 ranches in 12 states to sell on national and international markets under a brand that adheres to a common set of sustainability and animal welfare standards. The ranches treat cattle humanely, steward the environment, avoid using hormones and antibiotics, and are all family-owned (see [www.countrynaturalbeef.org](http://www.countrynaturalbeef.org)). Ranchers tend to be independent-minded and self-reliant but several examples across the U.S. West confirm their willingness to collaborate for their greater economic good.
- **Tactic #20 – Direct to consumer food marketing.** This tactic skips one or more middlemen in the supply chain so producers can capture more value. Recent years have seen proliferation of direct marketing approaches across California and nationwide. Common examples include farmers' markets, community supported agriculture (CSA), retail operations (including farm stands and roadside markets), mail order, U-pick or pick your-own, and direct sales to restaurants and various other institutions. Producers also make greater use of local produce aggregation and delivery services such as Door to Door Organics ([www.doortodoororganics.com](http://www.doortodoororganics.com)) and Blue Apron ([www.blueapron.com](http://www.blueapron.com)). One of our former graduate students, Alan Lovewell even created a marine CSA. Customers receive a weekly cooler of fresh fish caught by in the Monterey Bay by local fishermen ([www.realgoodfish.com](http://www.realgoodfish.com)).

In Inyo and Mono, the Eastern Sierra Food System Network (ESFSN) has explored ways to strengthen ties between local producers and consumers. A collaborative of public and private sector organizations, ESFSN strives to build community gardens, food co-ops, CSAs, and farmers markets, with an emphasis on increasing low-income residents' access to affordable, nutritious food.

- **Tactic #21 – Local and regional brands.** With tailwinds from the local food movement, a growing number of farming and ranching communities have developed their own brands. For both crops and livestock, the brand usually specifies a geographical feature. For example, 'Lava Lake' lamb products come from Lava Lake, 'Solano Grown' products come from Solano County, and so on. The 'Southwest Grass-fed Livestock Alliance' (SWGLA) offers an especially strong example. SWGLA is a non-profit alliance of ranchers, farmers, consumers, land managers, conservationists, researchers,

and local food system providers working together to support local, grass-fed livestock products (see [www.grassfedlivestock.org](http://www.grassfedlivestock.org)).

The 2009 Inyo and Mono “Natural Livestock Feasibility Study” described earlier also examined regional marketing opportunities. Local ranchers preferred ‘Eastern Sierra Beef’ as a potential brand name. That said, the Eastern Sierras seem to lack a large enough human population to drive sufficient demand for local meat. It might make sense to market local products as part of the greater ‘Tahoe Basin’ foodshed as well, with its larger population base.

This section has explored options for strengthening Inyo and Mono agriculture through economic diversification. It summarizes five main diversification strategies: diversification through new management practices, tenure arrangements, types of products, types of services, and markets & marketing. We ground the five strategies with 21 specific tactics developed and tested by farmers and ranchers in various locations. The discussion can serve as a jumping off point for local stakeholders interested in advancing this topic.

Rigorous feasibility testing and specific recommendations both lie beyond our purpose here. Nevertheless, we offer four final thoughts. First, evidence suggests that significant need and opportunity exist in Inyo and Mono to diversify into more value-added products. We encourage stakeholders to make it a priority. Second, although considerable value-added processing can occur with small-scale products, we think wine and cannabis hold particular promise for larger scale impact. Third, eight years and a major drought have passed since that last assessment of the local meat processing idea. Local meat remains a highly promising option and warrants another look. Finally, agritourism on working ranches and farms hold considerable promise, especially given its light touch on the land, cultural connection, and clear synergies with the larger tourism sector.

## Conclusion

This report has focused on ten questions about Inyo and Mono agriculture. The final section summarizes key takeaways from the study and poses priority research gaps to fill in the future. Ten major results, one for each section, are:

- **#1. Direct production value.** For 2015, agriculture produced a combine total of \$49.7 million across both counties, including \$18.5 million from Inyo and \$31.2 million from Mono. “Livestock & Livestock Products” was the largest category, contributing 48.3% of the counties’ combined total.

- **#2. Steady, overall growth.** Despite recent dips and variations across counties and categories, total farm production values have shown steady, long-term growth. From 2000 to 2015, the combined total output for both counties rose \$14.1 million (39.6%). This growth outpaced inflation by 3.9%.
- **#3. Multiplier effects.** Agricultural production creates ripples in the local economy. For example, every dollar's worth of economic output from Inyo Livestock and Livestock Products creates an extra 64 cents in purchases from suppliers and spending by agricultural employees, and 88 cents in Mono.
- **#4. Total economic output.** Agriculture's multiplier effects totaled \$9.0 million in Inyo and \$19.9 million in Mono, for a combined total of \$28.9 million. When added to the \$49.7 million in direct output mentioned above, agriculture's combined total economic output rises to \$78.6 million.
- **#5. Ownership of agricultural lands.** Across both counties combined, federal agencies own most of agricultural land (88.7%) and rangeland pasture is the most common use (97.2% of total area). Among field crops, private lands contributed the highest dollar output (63.8% of the total), mostly through alfalfa hay production (66.6% of all output).
- **#6. Employment and taxes.** Across both counties combined, agriculture provided 239 direct jobs plus an additional 210 from multiplier effects, for a total of 449 jobs. Total combined tax payments across local, state, and federal levels were \$6,287,128.
- **#7. Cross-county interdependencies.** Seasonal movement of cattle herds across county lines creates complex economic interdependencies. For example, an acre of Mono County irrigated pasture accounts for a combined \$1,657 in production across both counties. Alfalfa contributes for \$10,525.
- **#8. Significant non-market values.** Agricultural lands provide society with wildlife habitat, scenic beauty, carbon storage, and many other "ecosystem services." Established methodologies exist for quantifying the economic value of these contributions. We recommend the Benefit Transfer Methodology for its combination of rigor and cost effectiveness.
- **#9. Economic diversity within agriculture.** Combined across the two counties, the agricultural industry has an economic diversity index score of 1.75. While low, the number has remained stable over the past decade, unlike many California counties that have seen declines.
- **#10. Expansion through diversification.** Agriculture faces expansion opportunities through five diversification strategies. In terms of specific diversification focal areas, local meat processing remains an especially promising area, along with agritourism, cannabis and wineries.

**Priority Information Gaps to Fill.** Although this report has presented many facts and figures, it has barely begun to fill key information gaps about agriculture's economic role. The process of developing this report has raised several additional questions that lie beyond the scope of this report but may warrant future analysis. Priority research questions include:

- **A fuller understanding of inter-county linkages.** Due to its limited scope, this study has relied on limited data regarding livestock operations that straddle both counties. What is the full extent of this phenomenon? The unique economic opportunities and risks?
- **Analysis of inter-industry relationships.** The recent drought cost the agriculture industry an estimated \$35 million in lost production. What ripple effect did this create across other Inyo and Mono industries. For example, how many jobs and millions of dollars did real estate, restaurants, trucking, and other local industries experience as a result of agricultural companies and their employees having less money to spend?
- **Changes in land access.** This report has highlighted the serious economic implications of reducing the amount of land available for lease by ranchers. Exactly how much reduction has occurred in the recent past? What might the future hold, for example designations of new critical habitat for endangered species?
- **Regional integration.** What needs to happen in order for Inyo and Mono Counties to function as a more integrated, economically aligned, regional food system that supports sustainability and synergies?
- **Cannabis.** Experts predict an explosion of cannabis cultivation in response to California's legalization of recreational marijuana use. What economic opportunities and risks does this create for local agriculture? Will it decrease the amount of food that local growers produce?
- **Ecosystem services.** What is the annual dollar value of wildlife habitat, open space, scenic beauty, carbon sequestration, cultural preservation, pollination, and other "ecosystem services" that the county's agricultural lands provide to society?
- **Diversity.** How diverse are Inyo and Mono Counties' agriculture not just in terms of economic production categories, but also across farm sizes, geographical markets, organic/conventional, and operator demographics?

- **Diversification.** What new policies, programs, and other initiatives hold the most promise for strengthening agriculture through diversification into new products, services, and other means? What's required to advance this topic in a significant way?
- **Economic shocks.** The recent drought highlighted agriculture's vulnerability to large, outside forces. What other "shocks" could dramatically affect agriculture's economic results? How big a hit to economic output would they cause? What's the best way to anticipate and mitigate against them?

In conclusion, for more than a century agriculture has provided a vital link between Inyo and Mono Counties' cultural past and economic future. This report has provided an especially detailed snapshot of agriculture's current economic role. Although it is by no means a complete analysis, the study provides local stakeholders with important information for understanding local agriculture's current economic role and strengthening it for the future.

**July 18, 2017**  
**Regular Meeting**

**Item #9b**

**Public Health**

**2017-2022 Public  
Health Emergency  
Preparedness  
Contract Agreement**



KAREN SMITH, MD, MPH  
Director and State Health Officer

State of California—Health and Human Services Agency  
California Department of Public Health



EDMUND G. BROWN JR.  
Governor

July 5, 2017

Dr. Richard Johnson  
Health Officer  
Mono County  
PO Box 3329  
Mammoth Lakes, CA 93546

Sandra Pearce  
Health Executive  
Mono County  
PO Box 3329  
Mammoth Lakes, CA 93546

Dear Dr. Johnson & Ms. Pearce

The California Department of Public Health (CDPH) has approved your 2017-18 Local Grant Application, which includes funding for the following:

- Centers for Disease Control and Prevention (CDC) Public Health Emergency Preparedness Program (PHEP)
- State General Fund (GF) Pandemic Influenza Planning
- Hospital Preparedness Program (HPP)

If you have any questions, please do not hesitate to call your Emergency Preparedness Office Contract Manager.

Thank you,

Frances Viramontes-Maddox  
Assistant Deputy Director  
California Department of Public Health  
Emergency Preparedness Office

Enclosure

cc:

Deb Diaz  
Public Health Emergency Preparedness Coordinator/ Hospital Preparedness  
Coordinator  
Mono County  
PO Box 3329  
Mammoth Lakes, CA 93517

Dr. Richard Johnson  
Pandemic Influenza Coordinator  
Mono County  
PO Box 3329  
Mammoth Lakes, CA 93517

Edmund Kwong  
Contract Manager  
CDPH-EPO  
MS 7002-PO Box 997377  
Sacramento, CA 95899-7377



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

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# *Mono County*

# Local HPP Work Plan

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FY 17-18

5/1/2017

v2

Hospital Preparedness Program (HPP)

EMERGENCY PREPAREDNESS OFFICE

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**BE PREPARED CALIFORNIA**

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Mono County

**Capability 1: Foundation for Health Care and Medical Readiness**

**Goal:**

Local HPP Entities/Health Care Coalitions will coordinate planning, training, and exercises to prepare for disasters to improve healthcare system preparedness, including newly required Centers for Medicare & Medicaid Services (CMS) participants.

**HPP Entity Support Statement:**

Our Healthcare Coalition consists of 3 overlapping entities: Emergency Medical Care Committee (EMCC), Unified Command (UC), and Mammoth Hospital Disaster Committee. The EMCC has By-laws and Officers, and has representatives from public health (which includes environmental health), EMS (including the LEMSA - Inland Counties Emergency Medical Agency - ICEMA, the Mono County Paramedic Program, and a representative of the volunteer fire chiefs association. We meet bi-monthly, with agenda and minutes. The Mammoth Hospital Disaster Committee meets monthly, and consists of key members of the hospital response and planning group, and a representative from public health. The Unified Command meets quarterly, with agenda and attendees documented. Representatives are present from a variety of local, regional, state, and federal partners, including schools, utilities, private business, transportation, ARC, behavioral health, law, fire, EMS, military, public health, environmental health, social services, administration (town and county), tribal, and agencies serving at-risk populations.

**Known Gaps:**

Behavioral Health has had limited participation with us in planning and exercises. Redundancy in training for many ICS positions (DOC, EOC, MHOAC) is lacking, having been hampered by staff turnover and limited surge capacity. We recognize that due to our frontier remote location, mutual aid may be delayed, or in some cases (e.g., pandemic influenza), non-existent. Staff will be our biggest asset, but the lack thereof will be our biggest liability, as we have enough space and stuff for most anticipated events based on our risk assessments, but not a large staff to surge to meet the needs of a large event.

Mono County

Objective 1 (Domain 1, Activity 1) Define/identify Health Care Coalition boundaries to ensure HCC core member requirements are met. (HPP Guide: Obj. 1 Activity 1)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>If Applicable:</b> <b>If HCC meets core member requirements:</b> Provide activities to reflect what steps will be taken to include any new HCC members into the Coalition.  <b>If HCC does not meet core member requirements:</b> Provide activities to reflect what steps will be taken to incorporate current HCC members into a new Coalition to ensure core member requirements are met.	Objective					
	Q4	Deb Diaz				
<b>Activities</b>	Activities					
1 We (the HPP entity - Mono County Public Health) will sustain the Mono County Operational Area Healthcare Coalition at the Stage 3 level. (Notes 1 and 2)	Q1	Richard Johnson				
2 Since we do not meet the core member requirements of having 2 acute care hospitals, we will identify potential partners which will allow the formation of a new coalition meeting the membership requirements. (Note 1)	Q1	Richard Johnson				
3 We will explore and pursue relationships with potential partners in forming a new HCC in order to ensure core membership requirements are met. (Note 1)	Q1	Richard Johnson				
4 We will continue to attend, participate, and provide training content - curriculum and exercises - to members of the Mono County Emergency Medical Care Committee which meets bi-monthly. (Notes 1 and 2)	Q4	Richard Johnson				
5 We will continue to attend, participate, and provide training content - curriculum and exercises - to members of the Mammoth Hospital Disaster Committee which meets monthly. (Notes 1 and 2)	Q4	Richard Johnson				
6 We will continue to attend, participate, and provide training content - curriculum and exercises - to members of the Unified Command which meets quarterly. (Notes 1 and 2)	Q4	Richard Johnson				
7 Staff named in the grant will attend regional and state meetings to ensure that the local healthcare coalition is linked to regional and state entities for the purpose of situational reporting and resource requesting. These meetings are to include quarterly Region VI RDMHS meetings in Riverside, and quarterly CA-NV Border Counties Coalition meetings in Truckee. (Notes 1 and 2)	Q4	Richard Johnson				
8 Staff named in the grant will attend trainings in order to upgrade their skills, and to bring resources and tools back to the local jurisdiction for application in local planning, response, and recovery involving all members of the Healthcare Coalition. This will include the annual EPO Preparedness Workshop in Sacramento in June, 2018, and the annual NACCHO Preparedness Summit in Spring, 2018. (Notes 1 and 2)	Q4	Deb Diaz				

Mono County						
9						
10						
<b>Required Deliverable</b>	Deliverable(s)					
	1) Documentation					
<b>Notes:</b>						

Mono County

Objective 2 (Domain 1, Activity 1) Update and implement HCC Governance Structure. (HPP Guide: Obj. 1 Activity 3) See 5 Year HCC Activities Checklist or FOA for elements required in the Governance Structure.	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q2	Richard Johnson				
Activities						
1 The new HCC Governance documents will include identification of members. (Note 1)	Q2	Richard Johnson				
2 The new HCC Governance documents will include an organizational structure to support HCC activities. (Note 1) 6/9/17: Mono County Public Health will meet with potential members of a new HCC in order to create and review and approve a governance structure for a new coalition.	Q2	Richard Johnson				
3 The new HCC Governance documents will include member guidelines for participation and engagement. (Note 1)	Q2	Richard Johnson				
4 The new HCC Governance documents will include policies and procedures. (Note 1)	Q2	Richard Johnson				
5 The new HCC Governance documents will include integration with existing state, local, and member-specific incident management structures and specific roles. (Note 1)	Q2	Richard Johnson				
6						
7						
8						
9						
10						
Required Deliverable(s)						
Required Deliverable	1) Health Care Coalition Governance documents					
Notes:						

Mono County

Objective 3 (Domain 1, Activity 4) Engage members in health care system preparedness activities. (HPP Guide: Obj. 1)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q4	Richard Johnson				
<b>Activities</b>		Activities					
1	We (Public Health) will attend, participate, and provide training content - curriculum and exercises - to members of the Emergency Medical Care Committee which meets bi-monthly. (Notes 1 and 2)	Q4	Richard Johnson				
2	We will attend, participate, and provide training content - curriculum and exercises - to members of the Mammoth Hospital Disaster Committee which meets monthly. (Notes 1 and 2)	Q4	Richard Johnson				
3	We will attend, participate, and provide training content - curriculum and exercises - to members of the Unified Command which meets quarterly. (Notes 1 and 2)	Q4	Richard Johnson				
4	We will attend, participate, and provide training content - curriculum and exercises - to members of a new HCC, in whatever meeting format and location is selected by a new HCC. (Notes 1 and 2)	Q4	Richard Johnson				
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<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation							
<b>Notes:</b>							

Mono County

Objective 4 (Domain 1, Activity 2) Annually complete a Hazard Vulnerability Analysis (HVA) with the engagement of each healthcare provider or provider type. (HPP Guide: Obj. 2 Activity 1)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q3	Richard Johnson				
<b>Activities</b>		Activities					
1	Public Health will review and update the OA Health Hazard Risk Assessment. (Note 7)	Q3	Deb Diaz				
2	Public Health will educate the Mammoth Hospital Disaster Committee on the top three hazards, identify whether or not the top three hazards are included in their facility plans, and identify their roles and responsibilities in response, including prioritized mitigation activities based on resource availability. (Notes 2 and 7)	Q3	Deb Diaz				
3	Public Health will educate the Emergency Medical Care Committee on the top three hazards, identify whether or not the top three hazards are included in their facility plans, and identify their roles and responsibilities in response, including prioritized mitigation activities based on resource availability. (Notes 2 and 7)	Q3	Richard Johnson				
4	Public Health will educate the Unified Command on the top three hazards, identify whether or not the top three hazards are included in their facility plans, and identify their roles and responsibilities in response, including prioritized mitigation activities based on resource availability. (Notes 2 and 7)	Q3	Richard Johnson				
5	Public Health will perform the same functions within the structure of a new HCC once it is formed. (Notes 2 and 7)	Q3	Richard Johnson				
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<b>Required Deliverable</b>	1) Documentation of completed HVA			Deliverable(s)			
<b>Notes:</b>							

Mono County

Objective 5 (Domain 1, Activity 2) Assess health care resources and include those resources in the Emergency Resource Directory. Provide updates to the MHOAC program. (HPP Guide: Obj. 2 Activity 2)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Public Health will maintain the ERD on an annual basis, and make the current ERD available to the MHOAC Program. (Note 5)	Q4	Deb Diaz				
2	Public Health and the MHOAC Program will coordinate with the RDMHS Program in Region VI to provide requested jurisdictional information on an annual basis, with documentation of such exchange of information provided in the local ERD. (Note 5)	Q4	Deb Diaz				
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<b>Required Deliverable</b>	1) Update ERD 2) Update Regional ERD	Deliverable(s)					
<b>Notes:</b>							

Mono County

Objective 6 (Domain 1, Activity 3) Identify organizations that serve individuals with access and functional needs (ex: pregnant women, disabled, veterans, etc.), including identifying their resource capabilities and contact information. (HPP Guide: Obj. 2 Activity 4)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Public Health will continue to develop its Access and Functional Needs (AFN) Registry Plan with local OES. (Notes 8 and 9)	Q1	Deb Diaz				
2	Public Health will continue to conduct outreach to the public regarding the registry. (Notes 2 and 9)	Q4	Deb Diaz				
3	Public Health will keep the registry updated and current. (Notes 2 and 9)	Q4	Deb Diaz				
4	Public Health and OES will continue to develop plans to roll out the registry data to the end user (first responders) according to approved policy and procedure. (Notes 8 and 9)	Q3	Deb Diaz				
5	Public Health will educate the Healthcare Coalition on the registry plan, including how to activate the plan in order to reach the targeted population. (Notes 8 and 9)	Q3	Deb Diaz				
6	Public Health will work with a new HCC in adjusting above plans to fit the new boundaries, membership, and organizational structure of a new HCC. (Notes 1 and 9)	Q4	Deb Diaz				
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<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation							
<b>Notes:</b>							

Mono County

Objective 7 (Domain 1, Activity 1) Update and submit HCC Preparedness Plan to EPO by the end of FY 17/18. (HPP Guide: Obj. 3)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>Note: This is most likely the county MHOAC Guide. One option is to create an appendix to include elements required for the HCC Preparedness Plan on page 17 of the 2017-2022 Health Care Preparedness and Response Capabilities Guide.</b>		Objective					
		Q2	Richard Johnson				
<b>Activities</b>		Activities					
1	The Health Department will review the Mono County MHOAC Program Manual, and revise to include any missing elements required in an HCC Preparedness Plan. (Note 8)	Q1	Richard Johnson				
2	The Health Department will work with the new HCC in developing documents that meet the requirements of an HCC Preparedness Plan for the new HCC once it is formed. (Note 9)	Q2	Richard Johnson				
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<b>Required Deliverable</b>		Deliverable(s)					
	1) Documentation						
<b>Notes:</b>							

Mono County

<b>Objective 8 (Domain 1, Activity 1)</b> In coordination with the Local Health Department (LHD), review the State MHOAC Guide when made available by CDPH. Implement any changes necessary into the Local MHOAC Guide.		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
		Q4	Richard Johnson				
<b>Activities</b>		Activities					
1	The MHOAC is a co-author on the MHOAC Guide, and will continue to work with EMSAAC on revisions as necessary. (Note 9)	Q4	Richard Johnson				
2	The MHOAC has produced a Mono County MHOAC Program Manual in draft form, which will be revised as recommendations are received from partners in the HCC. (Note 9)	Q1	Richard Johnson				
3	The MHOAC will work with a new HCC to produce a MHOAC Program Manual(s) that will serve the entire boundary of a new HCC. (Note 9)	Q2	Richard Johnson				
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<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation							
<b>Notes:</b>							

Mono County

Objective 9 (Domain 1, Activity 5) Plan, conduct, and evaluate exercises (should be aligned with federal standards and facility accreditation requirements and integrate children and behavioral health impacts and populations). (e.g.: statewide and/or Health Care Coalition Surge Test Exercise, Real Event) (HPP Guide: Obj. 4 Activities 3 & 4)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Deb Diaz				
Activities						
1 The Health Department will lead a planning meeting for the 2017 Statewide Medical and Health Exercise with HCC partners. (Note 3)	Q1	Deb Diaz				
2 The Health Department will lead a tabletop exercise as part of the 2017 Statewide Medical and Health Exercise. (Note 3)	Q2	Deb Diaz				
3 The Health Department will lead a functional exercise as part of the 2017 Statewide Medical and Health Exercise. (Note 3)	Q2	Deb Diaz				
4 The Health Department will work with Mammoth Hospital in conducting the Health Care Coalition Surge Test Exercise. (Note 3)	Q3	Ruchard Johnson				
5 The Health Department will conduct a CHEMPACK tabletop exercise with the Mammoth Hospital Disaster Committee in order to meet their accreditation requirements. (Note 3)	Q4	Ruchard Johnson				
6 The Health Department will conduct a CHEMPACK tabletop exercise with the Emergency Medical Care Committee. (Note 3)	Q4	Ruchard Johnson				
7 The Health Department will conduct a CHEMPACK tabletop exercise with the Unified Command. (Note 3)	Q4	Ruchard Johnson				
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Deliverable(s)						
Required Deliverable	1) Documentation					
Notes:						

Mono County

Objective 10 (Domain 1, Activity 4) Conduct outreach activities to engage Tribal entities in healthcare planning efforts to prepare, respond, and recover from incidents that have public health and medical impact as applicable to the jurisdiction.	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Deb Diaz				
Activities						
1 Public Health will continue to provide information, training, and exercises to Toiyabe Indian Health Project (TIHP) personnel at the Unified Command meetings. (Note 2)	Q4	Deb Diaz				
2 Key staff members designated by the TIHP to participate in healthcare planning to prepare, respond, and recover from incidents that have public health and medical impact receive Mono-Grams, which contain emergency preparedness, response, and recovery content. (Note 2)	Q4	Richard Johnson				
3 Key staff members designated by the TIHP to participate in healthcare planning to prepare, respond, and recover from incidents that have public health and medical impact are included in the Field to OA Sit Rep and Resouce Requesting form to ensure bidirectional sharing of information between TIHP and the MHOAC Program. (Note 2)	Q1	Deb Diaz				
4 TIHP staff will be invited to participate in the planning meeting for the SWMHE in 2017. (Note 3)	Q1	Deb Diaz				
5 TIHP staff will be invited to participate in the SWMHE in Fall, 2017. (Note 3)	Q2	Deb Diaz				
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<b>Required Deliverable</b>	Deliverable(s)					
1) Documentation						
<b>Notes:</b>						

Mono County

Objective 11 <i>Optional</i>	Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
			Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Objective						
Activities						
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Required Deliverable						
1)						
Notes:						

Mono County

Objective 12 <i>Optional</i>		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
<b>Activities</b>		Activities					
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<b>Required Deliverable</b>		Deliverable(s)					
1)							
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3)							
<b>Notes:</b>							

Mono County

**Capability 2: Health Care and Medical Response Coordination**

**Goal:**

Health Care Coalition (HCC) and its members will plan and collaborate to share and analyze information, manage and share resources, and coordinate strategies to deliver medical care to all populations during emergencies and planned events.

**Known Gaps:**

Communication drills have not occurred on a regularly scheduled basis. Our acute care hospital does not have an efficient way to notify staff of a medical surge or call-in. Our jurisdiction wide JIS has not been operational due to staff changes.

Mono County

Objective 1 (Domain 2, Activity 4) In coordination with the LHD, begin the development of the HCC Response Plan. (HPP Guide: Obj. 1 Activities 1 & 2)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>Note: See page 27 of the 2017-2022 Health Care Preparedness and Response Capabilities Guide for all required elements of the HCC Response Plan due by FY 18/19. During the last Five Year Grant Cycle, several of these elements were required objectives and may already be in existing documents/plans.</b>	Objective					
	Q4	Richard Johnbson				
Activities						
1	Once a new HCC has been formed, we will examine documents for the existence of required elements in a new HCC Response Plan, and produce a list of missing items. (Notes 2 and 9)	Q2	Richard Johnbson			
2	From this list, the new HCC will begin work on producing a new HCC Response Plan with all the required elements. (Notes 2 and 9)	Q4	Richard Johnbson			
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Required Deliverable			Deliverable(s)			
	1) Draft HCC Repsonse Plan					
Notes:						

Mono County

Objective 2 (Domain 3, Activity 2) HCC train and test redundant communication systems and existing information sharing procedures. (HPP Guide: Obj. 2 Activity 1 & 3)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Public Health will review and revise existing documents (MHOAC Program Manual, Information Sharing, Field-to-OA Sit Rep), for current content and procedures with a new HCC. (Notes 2 and 8)	Q2	Deb Diaz				
2	Public Health will conduct a jurisdiction wide communications drill with Healthcare Coalition members during the 1st quarter. (Note 3)	Q1	Deb Diaz				
3	Public Health will conduct a jurisdiction wide communications drill with Healthcare Coalition members during the 2nd quarter. (Note 3)	Q2	Deb Diaz				
4	Public Health will conduct a jurisdiction wide communications drill with Healthcare Coalition members during the 3rd quarter. (Note 3)	Q3	Deb Diaz				
5	Public Health will conduct a jurisdiction wide communications drill with Healthcare Coalition members during the 4th quarter. (Note 3)	Q4	Deb Diaz				
6	Public Health will include a communication objective in the 2017 Statewide Medical and Health Exercise. (Note 3)	Q2	Deb Diaz				
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<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation							
<b>Notes:</b>							

Mono County

Objective 3 (Domain 1, Activity 2) Update Emergency Resource Directory to include resources and vendor list. (HPP Guide: Obj. 3 Activities 1 & 2)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Public Health will maintain a current ERD for medical and health resources. (Note 2)	Q4	Deb Diaz				
2	Public Health will ensure that a vendor list is included in the ERD. (Note 2)	Q1	Deb Diaz				
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<b>Required Deliverable</b>	1) Documentation	Deliverable(s)					
<b>Notes:</b>							

Mono County

Objective 4 (Domain 3, Activity 3) In the communications plan, identify the method for HCC to be linked to the Joint Information Center (JIC) to provide message coordination (MHOAC, HCC Representative, PH, etc.) (HPP Guide: Obj. 3 Activity 3)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q1	Richard Johnson				
Activities						
The MHOAC will ensure that the method for HCC partners to be linked to the JIC is included in the MHOAC Program Manual. (Note 9)	Q1	Richard Johnson				
6/9/17: Due to staff turnover in the local OES, the MHOAC will first clarify who is functioning as the Operational Area PIO and facilitating the opening of a JIC and functioning of a county-wide JIS. (Note 2)	Q1	Richard Johnson				
6/9/17: The MHOAC will clarify redundant methods of communication for members of the HCC to be linked to the JIS and a JIC, and will outline these methods in the MHOAC Program Manual, and provide appropriate education to members of the HCC. (Note 2)	Q1	Richard Johnson				
Deliverable(s)						
Required Deliverable	1) Documentation					
Notes:						

Mono County

Objective 5 (Domain 3, Activity 3) Provide HCC members with templates or assistance to develop facility communications plan to address patients, staff, visitors and public. (HPP Guide: Obj. 3 Activity 4)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q1	Deb Diaz				
Activities						
Public Health will research the availability of templates and tools for facility communications plans to address patients, staff, visitors, and public. (Note 2)	Q1	Deb Diaz				
Public Health will provide available resources to HCC members. (Note 2)	Q1	Deb Diaz				
Deliverable(s)						
Required Deliverable	1) Documentation					
Notes:						

Mono County

Objective 6 <i>Optional</i>		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
Activities		Activities					
Required Deliverable		Deliverable(s)					
1)							
2)							
3)							
Notes:							

Mono County

Objective 7 <i>Optional</i>		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
Activities		Activities					
Required Deliverable		Deliverable(s)					
1)							
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Notes:							

Mono County

**Capability 3: Continuity of Health Care Service Delivery**

**Goal:**

The Health Care Coalition (HCC) and its members will plan and collaborate to build and improve continuity of health care service delivery during emergencies or planned events.

**Known Gaps:**

Due to changes in leadership, training for EMS, and incorporation of behavioral health aspects of first responder health and safety have not been addressed. Although partners are familiar with field-to-OA resource requesting procedures, they have not been drilled adequately, and the aspects of closed PODs have not been addressed.

Mono County

Objective 1 (Domain 2, Activity 4)	Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
			Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
The HCC needs to identify the following components for the HCC Continuity of Operations Plan (COOP): -essential functions -orders of succession/delegation of authority -administrative and finance functions (HPP Guide: Obj. 2, Activity 2)  See page 31 of FOA for additional requirements of the COOP.	Objective					
	Q2	Richard Johnson				
Activities						
1	The new HCC will identify essential functions for each member in a document. (Note 8)	Q2	Richard Johnson			
2	The new HCC will identify orders of succession/delegation of authority for leadership continuity in a document (Note 8)	Q2	Richard Johnson			
3	The new HCC will identify administrative and finance functions and responsibilities of members in the HCC in a document. (Note 8)	Q1	Richard Johnson			
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Required Deliverable	Deliverable(s)					
	1) Documentation					
Notes:						

Mono County

Objective 2 (Domain 3, Activity 1) Share HCC information sharing platforms/processes with HCC members that can be used in their facilities' COOP. (HPP Guide: Obj. 2 Activity 1)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
		Objective					
		Q2	Richard Johnson				
<b>Activities</b>		Activities					
1	The new HCC will define communication methods, frequency of information sharing, and redundant/interoperable communication systems and platforms to share information during an emergency response. (Note 2)	Q2	Richard Johnson				
2	The new HCC will identify triggers for activation and notification. (Note 8)	Q2	Richard Johnson				
3	The new HCC will define essential elements of information that HCC members should report to the MHOAC. (Note 8)	Q2	Richard Johnson				
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<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation							
<b>Notes:</b>							

Mono County

Objective 3 (Domain 4, Activity 1) Receive training from LHDs on their MCM distribution and dispensing plans focusing on how HCC members can request pharmaceuticals and medical supplies by June 30, 2018. (HPP Guide: Obj. 3)  See pages 38 & 39 of FOA.	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q3	Deb Diaz				
Activities						
1 Public Health will provide training on the MCM Plan, including situation reporting and resource requesting of pharmaceuticals and/or medical supplies, including closed PODs, to the Mammoth Hospital Disaster Committee. (Note 2)	Q3	Deb Diaz				
2 Public Health will provide training on the MCM Plan, including situation reporting and resource requesting of pharmaceuticals and/or medical supplies, including closed PODs, to the Emergency Medical Care Committee. (Note 2)	Q3	Deb Diaz				
3 Public Health will provide training on the MCM Plan, including situation reporting and resource requesting of pharmaceuticals and/or medical supplies, including closed PODs, to the Unified Command. (Note 2)	Q3	Deb Diaz				
4 Public Health will provide training on the MCM Plan, including situation reporting and resource requesting of pharmaceuticals and/or medical supplies, including closed PODs, to any other members of a new HCC. (Note 2)	Q3	Deb Diaz				
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Required Deliverable(s)						
Required Deliverable	1) Documentation					
Notes:						

Mono County

Objective 4 (Domain 4, Activity 2) Identify potential behavioral health impact(s) to health care responders based off top three hazards. (HPP Guide: Obj. 5)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q3	Richard Johnson				
<b>Activities</b>		Activities					
1	Public Health will meet with the Mammoth Hospital Disaster Committee to create a list of potential behavioral health impacts on health care responders involving the top 3 hazards. (Note 2)	Q3	Richard Johnson				
2	Public Health will meet with the Emergency Medical Care Committee to create a list of potential behavioral health impacts on health care responders involving the top 3 hazards. (Note 2)	Q3	Richard Johnson				
3	Public Health will meet with Mono County Behavioral Health to create a list of potential behavioral health impacts on health care responders involving the top 3 hazards. (Note 2)	Q3	Richard Johnson				
4	Public Health will meet with members of a new HCC to consolidate and reach consensus on a list of potential behavioral health impacts on health care responders involving the top 3 hazards. (Note 2)	Q3	Richard Johnson				
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<b>Required Deliverable</b>		Deliverable(s)					
1) List of impacts							
<b>Notes:</b>							

Mono County

Objective 5 (Domain 4, Activity 2) Identify training requirements to help protect Responders' Safety and Health. (HPP Guide: Obj. 5)  Examples of trainings: FRA/FRO/DECON training, Fit testing, ATD training, psychological first aid, etc.)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Deb Diaz				
Activities						
1 Public Health will maintain a current Exposure Control Plan for health care workers and first responders which deals with bloodborne and respiratory pathogens. (Note 8)	Q1	Richard Johnson				
2 Public Health will provide a Respiratory Protection Program including fit testing, for public health and other agencies requesting support in protecting their staff. (Note 8)	Q3	Deb Diaz				
3 Public Health will communicate with CDC, CDPH, EMSA, CalOSHA, etc., to ensure that recommendation for PPE are available to all first responders in any incidents that occur (e.g., Ebola). (Note 2)	Q4	Richard Johnson				
4 Public Health will maintain an inventory of all PPE available within the boundary of the HCC. (Note 2)	Q1	Deb Diaz				
5 The MHOAC will continue to work with partners in Region VI and the RDMHS Program to develop a Region VI Medical and Health Mutual Aid Program which will include PPE. (Note 8)	Q3	Richard Johnson				
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Required Deliverable(s)						
Required Deliverable	1) Documentation					
Notes:						

Mono County

Objective 6 (Domain 1, Activity 5 or Domain 5, Activity 4) Plan, conduct, and evaluate Coalition Surge Test Exercise. (See HPP Performance Measures 13, 14, 15, 17, 18, 19 & 20)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Richard Johnson				
Activities						
1	Public Health will plan, conduct, and evaluate the Coalition Surge Test Exercise with partners in a new HCC. (Note 3)	Q3	Richard Johnson			
2	Public Health will lead a new HCC in the development of a HCC Preparedness Plan (Performance Measure 13). (Notes 2 and 8)	Q3	Richard Johnson			
3	Public Health will lead a new HCC in the development of a HCC Response Plan (Performance Measure 14). (Notes 2 and 8)	Q4	Richard Johnson			
4	A new HCC will obtain de-identified data from emPOWER once per quarter (Performance Measure 15). (Note 9)	Q4	Ded Diaz			
5	The new HCC will document which acute care hospitals within the boundaries of the HCC have an ED recognized by statewide, or regional standardized system that is able to stabilize and/or manage pediatric medical emergencies (Performance Measure 17). Note 2)	Q2	Richard Johnson			
6	The new HCC will document that it is incorporated into the ESF-8 response plans within its jurisdictions (Performance Measure 19). (Note 2)	Q2	Richard Johnson			
7	The new HCC will document its involvement in the jurisdictional risk assessment (Performance Measure 20). (Note 2)	Q2	Richard Johnson			
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Required Deliverable(s)						
Required Deliverable	1) Documentation 2) Report of HPP Performance Measures					
Notes:						

Mono County

Objective 7 Optional		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
<b>Activities</b>		Activities					
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<b>Required Deliverable</b>		Deliverable(s)					
1)							
2)							
3)							
<b>Notes:</b>							

Mono County

Objective 8 Optional		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
<b>Activities</b>		Activities					
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4							
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6							
7							
8							
9							
10							
<b>Required Deliverable</b>		Deliverable(s)					
1)							
2)							
3)							
<b>Notes:</b>							

Mono County

**Capability 4: Medical Surge**

**Goal:**

Health Care Coalitions (HCC), in collaboration with the Emergency Support Function-8 (ESF-8/ EF-8) lead agency, coordinates information and available resources for its members to maintain conventional surge response. When an emergency overwhelms the HCC's collective resources, the HCC supports the health care delivery system's transition to contingency and crisis surge response and promotes a timely return to conventional standards of care as soon as possible utilizing the Emergency Operations Manual.

**Known Gaps:**

There is no coordinated Family Reunification Plan. Efforts to create a patient tracking plan have been awaiting the release of the CA Patient Movement Plan, so do not exist yet.

Mono County

Objective 1 (Domain 5, Activity 2) Incorporate Medical Surge Planning into the Health Care Organization's Emergency Operations Plan (EOP). (HPP Guide: Obj. 1 Activity 1)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Richard Johnson				
Activities						
1 The HCC will confirm that each acute care hospital has all of the critical elements (See page 26 of the HPP Guide) included in its EOP. (Note 2)	Q2	Richard Johnson				
2 The HCC will document all Performance measures completed by each acute care hospital. (Note 2)	Q2	Richard Johnson				
3 Public Health will lead the Coalition Surge Test Exercise, and document achievement of each of the applicable Performance Measures. (Note 3)	Q3	Richard Johnson				
4 Public Health will provide trainings at monthly meetings of the Mammoth Hospital Disaster Committee to include surge topics. (Note 2)	Q4	Richard Johnson				
5 A member of the Mammoth Hospital Disaster Committee will attend the CHA conference in Sacramento in Sep, 2017. (Note 2)	Q2	Deb Diaz				
6						
7						
8						
9						
10						
Required Deliverable(s)						
1) Documentation 2) Completed Performance Measures <b>IF jurisdiction has a COMPLETED Plan, (Performance Measures)</b> 3) Documentation of training Optional: 4) Documentation of exercise/drill						
Notes:						

Mono County

Objective 2 (Domain 2, Activity 4 or Domain 5, Activity 2) Incorporate Medical Surge into the Health Care Coalition Response Plan. (Refer to Capability 2, Objective 1). (HPP Guide: Obj. 1 Activity 3)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Richard Johnson				
Activities						
1	Public Health will lead the new HCC in beginning to develop a HCC Response Plan, which will include medical surge. (Note 2 and 8)	Q4	Richard Johnson			
2	6/9/17: Public Health will review the required elements for a HCC Response Plan in guidance documents, and prepare a summary and presentation for an HCC meeting. (Notes 2 and 4)	Q4	Richard Johnson			
3	6/9/17: Public Health will present the requirements to the HCC, and invite discussion and input into a new HCC Response Plan. (Notes 2 and 4)	Q4	Richard Johnson			
4	6/9/17: Public Health, based on the requirements, the discussion and input received, will create a new draft HCC Response Plan. (Notes 2 and 4)	Q4	Richard Johnson			
5	6/9/17: Public Health will meet with the HCC, facilitate the development of consensus, and finally approval of a new HCC Response Plan. (Note 8)	Q4	Richard Johnson			
6						
7						
8						
9						
10						
Required Deliverable			Deliverable(s)			
1) Draft HCC Response Plan <b>IF jurisdiction has a COMPLETED Plan</b> 2) Documentation of training Optional: 3) Documentation of exercise/drill						
Notes:						

Mono County

Objective 3 (Domain 5, Activity 2) Begin the process for Family Reunification Plans.		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q3	Richard Johnson				
<b>Activities</b>		Activities					
1	Review existing plans for policies and procedures regarding family reunification (e.g., EOP, DOP, etc.) (Note 4)	Q1	Richard Johnson				
2	Create a Family Reunification Plan based on existing documents and other resources (Note 4)	Q2	Richard Johnson				
3	Provide training on this plan to the EMCC. (Note 9)	Q3	Richard Johnson				
4	Provide training on this plan to the Mammoth Hospital Disaster Committee. (Note 9)	Q3	Richard Johnson				
5	Provide training on this plan to the Unified Command. (Note 9)	Q3	Richard Johnson				
6	Provide training on this plan to other members of the new HCC. (Note 9)	Q3	Richard Johnson				
7							
8							
9							
10							
<b>Required Deliverable</b>		Deliverable(s)					
1) Draft HCC Response Plan <b>IF jurisdiction has a COMPLETED Plan</b> 2) Documentation of training Optional: 3) Documentation of exercise/drill							
<b>Notes:</b>							

Mono County

Objective 4 (Domain 2, Activity 1 or Domain 5, Activity 1) Review State Patient Movement Plan when made available by CDPH.		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
		Q2	Richard Johnson				
<b>Activities</b>		Activities					
1	Public Health will review the State Patient Movement Plan with the Mammoth Hospital Disaster Committee. (Note 2)	Q2	Richard Johnson				
2	Public Health will review the State Patient Movement Plan with the Emergency Medical Services Committee. (Note 2)	Q2	Richard Johnson				
3	Public Health will review the State Patient Movement Plan with the Unified Command. (Note 2)	Q2	Richard Johnson				
4	Public Health will review the State Patient Movement Plan with other members of a new HCC. (Note 2)	Q2	Richard Johnson				
5							
6							
7							
8							
9							
10							
<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation							
<b>Notes:</b>							

Mono County

Objective 5 (Domain 5, Activity 4)	Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
			Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Evaluate and test components of Medical Surge with Hospital Emergency Department/Inpatient and Out-Of Hospital (other healthcare entities) partners. Components* of Medical Surge Planning include :  -Pediatric Care -Chemical or Radiation -Burn Care -Trauma Care -Behavioral Health -Infectious Disease -Medical Countermeasures -Mass Fatalities  (HPP Guide: Obj. 2)  See Appendix I for HPP Performance Measures  *Over the 5 Year Grant Cycle all eight components MUST BE tested at least once.						
	Q1	Deb Diaz				
Objective						
Activities						
1	Public Health will lead the HCC in a planning meeting for the 2017 Statewide Medical and Health Exercise, at which time multiple components of Medical Surge will be selected for testing and evaluation during the following tabletop and functional exercises. (Note 3) 6/9/17: At the SWMHE Planning meeting, attendees will discuss and decide on which of the above components will be tested in the 2017 SWMHE, and decide on level of functionality and specific objectives to be tested and evaluated and reported in the AAR/IP during this first year. (Notes 2 and 3)	Q1	Deb Diaz			
2						
3						
4						
5						
6						
7						
8						
9						
10						
Deliverable(s)						
Required Deliverable	1) Documentation					
Notes:						

Mono County

Mono County

Objective 6 (Domain 5, Activity 3)	Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
			Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Evaluate jurisdiction's Alternate Care System. This includes, but not limited to, Alternate Care Sites and Medical Shelters. Select two of the following to review if sustainable for jurisdiction:  - Telemedicine/Virtual Medicine - Screening/Triage/Early Treatment - Medical Care at Shelters - Disaster Alternate Care Facilities Selection and Operation (HPP Guide: Obj. 2 Activity 3)	Objective					
	Q3	Deb Diaz				
Activities						
1	Public Health will review/revise plans for screening/triage/early treatment in the alternate care system within the jurisdiction. (Note 5)	Q3	Richard Johnson			
2	Public Health will review/revise plans for public health and medical involvement in general and medical shelters. (Note 5)	Q1	Richard Johnson			
3	Public Health will review/revise the GAACS Plan to ensure it contains all the required elements. (Note 5)	Q1	Deb Diaz			
4	Public Health will review plans for each acute care hospital for alternate sites for an ED (e.g., both on-campus and off-campus). (Note 2)	Q1	Deb Diaz			
5						
6						
7						
8						
9						
10						
Required Deliverable			Deliverable(s)			
1) Documentation of reviewing two of the identified methods for Alternate Care System						
Notes:						

Mono County

Objective 7				Mid-Year Report		Year End Report	
Optional	Est. Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>		Status	Primary Barrier <i>(Describe in Notes)</i>
				Objective			
<b>Activities</b>		<b>Activities</b>					
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
<b>Required Deliverable</b>		<b>Deliverable(s)</b>					
1)							
2)							
3)							
<b>Notes:</b>							

Mono County

Objective 8 Optional		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
		Activities					
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Required Deliverable		Deliverable(s)					
1)							
2)							
3)							
Notes:							

Mono County

**Capability 4: Medical Surge - LEMSA**

**Goal:**

Strengthen and further integrate the EMS response to public health and medical emergencies.

**Known Gaps:**

MCLEMSA ICEMA

Mono County

Objective 1 (Domain 5, Mgmt of Medical Surge Activity 2)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>LEMSA:</b> Provide training for first responders and Health Care Coalition members on plans, policies, and procedures for the transition from a single multi-casualty incident into a disaster response.	Objective					
	Activities					
	1					
	2					
	3					
	4					
	5					
	6					
	7					
8						
9						
10						
Required Deliverable			Deliverable(s)			
1) Documentation						
Notes:						

Mono County

Objective 2 (Domain 5, Mgmt of Med Surge, Activity 4)	Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
			Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
<b>LEMSA:</b> Participate in the development, training, and testing of regional emergency transportation plans for transport of suspect/confirmed patients with Ebola or other highly pathogenic diseases between frontline hospitals, Assessment Hospitals, and Treatment Centers.	Objective					
	Activities					
	1					
	2					
	3					
	4					
	5					
	6					
	7					
8						
9						
10						
<b>Required Deliverable</b>	1) Documentation of regional planning with the Healthcare Coalition and Operational Area partners. 2) Patient tracking procedures for EMS		Deliverable(s)			
<b>Notes:</b>						

Mono County

Objective 3 (Domain 5, Mgmt of Med Surge, Activity 2)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>LEMSA:</b> Participate in information sharing for immediate Bed Availability and CAHAN systems as appropriate for the LEMSA role and according to local policy.	Objective					
Activities						
1	Participate in quarterly Bed Availability drills.					
2	Coordinate with the LHD and HPP Entity to register, update, and maintain EMS contacts in CAHAN.					
3	Participate in quarterly CAHAN drills.					
4						
5						
6						
7						
8						
9						
10						
Required Deliverable(s)						
Required Deliverable	1) Updated EMS contacts in CAHAN.					
Notes:						

Mono County

Objective 4 (Domain 2, Activity 4)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>LEMSA:</b> Work collaboratively with the Local Health Department (LHD) to identify a local initiative or project to meet local needs and delineate the LEMSA role from the public health/county role. Please list deliverables below as appropriate for the identified project.	Objective					
	Activities					
	1					
	2					
	3					
	4					
	5					
	6					
	7					
8						
9						
10						
Required Deliverable			Deliverable(s)			
1)						
2)						
Notes:						

Mono County

Objective 5		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Optional							
		Objective					
Activities		Activities					
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Required Deliverable		Deliverable(s)					
1)							
2)							
3)							
Notes:							

Mono County

Objective 6		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Optional							
Objective							
Activities							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Deliverable(s)							
Required Deliverable	1)						
	2)						
	3)						
Notes:							

## General Notes

.	All Objective Activities and Deliverables should be S.M.A.R.T (Specific, Measurable, Assignable, Realistic, and Time-related).	
.	<b>Small, Medium, Large Counties</b> (CHEAC)	<b>Small County:</b> Population < 200,000
		<b>Medium County:</b> Population 200,000 - 699,999
		<b>Large County:</b> Population 700,000 or more

## Specific Notes

#	Subject	Note
1	<b>HCC Members/Partners</b>	<p>ASPR defines an HCC member as an entity within the HCC's defined boundaries that contributes to HCC strategic planning, identification of gaps and mitigation strategies, operational planning and response, information sharing, and resource coordination and management.</p> <p>See HPP 2017-2022 Capability Guide, Capability 1, Objective 1, Activity 2 for a list of HCC partners/members (not limited to the list)</p> <p><a href="https://www.phe.gov/Preparedness/planning/hpp/reports/Documents/2017-2022-healthcare-pr-capabilities.pdf">https://www.phe.gov/Preparedness/planning/hpp/reports/Documents/2017-2022-healthcare-pr-capabilities.pdf</a></p>
2	<b>Documentation</b> Depending on the objective/activity this includes but not limited to:	<p>Meeting Agenda</p> <p>Key outcomes/discussion and action items</p> <p>List of all invitees (distinguish between actuals and no-shows)</p> <p>AAR/IP</p> <p>Training materials</p> <p>Exercise materials</p> <p>List of participants</p> <p>Meeting Minutes</p>
3	<b>Evaluate in drill, exercise, or real event</b> This includes:	<p>HSEEP compliant exercise</p> <p>AAR/IP</p> <p>List of Participants</p> <p>Copy of exercise materials</p>
4	<b>Developing a plan activities</b> examples	<p>Meet with stakeholders</p> <p>Research</p> <p>Draft</p>

# FY 17-18 HPP Work Plan

		Share draft with stakeholders
		Revise to include stakeholder input
		Approval of plan
5	<b>Sustainment activities</b> examples	Meet with stakeholders
		Training
		Test, drill, exercise
		Updating procedures, processes, checklists, Job Action Sheets, contact lists etc.
		Review/Revise plan(s)
6	<b>Access to Care</b>	Access to care includes physical access to public health or healthcare services during a disaster. (e.g., transportation, accessible medical care sites such as medical shelters or field treatment sites, PODs, etc.).
7	<b>Top prioritized hazard(s):</b>	The top hazard(s), as prioritized by the county. This does not require that you use the top hazards from the 2012 Public Health Risk Assessment.
8	<b>Completed plans, procedures, protocols, etc...</b>	Completed plans, policies, and protocols includes approved according to local policy. Working drafts may be considered completed if they are reviewed and updated as needed every two years.
9	<b>At-Risk Populations</b>	As defined at the local level, i.e. what populations are at-risk within your operational area. Additional resource: <a href="http://www.phe.gov/Preparedness/clearinghouse/casualty/Documents/atrisk.pdf">http://www.phe.gov/Preparedness/clearinghouse/casualty/Documents/atrisk.pdf</a>

10	<b>Required Planning Elements</b> Exercise must include at least 3	<ol style="list-style-type: none"> <li>1. Triggers for activation of the plan</li> <li>2. Decompression of hospitals, preload diversion to other delivery sites including government authorized alternate care sites and triage protocols and routing of patients</li> <li>3. Evacuation/shelter in place plans and Operational Area support of facility plans</li> <li>4. Process for engaging behavioral/mental health</li> <li>5. Patient movement, distribution, and tracking</li> <li>6. Volunteer management</li> <li>7. Policies and procedures for information sharing and resource requesting for healthcare coalition members consistent with standard EOM requirements.</li> </ol>
11	<b>Pediatric or Neo-Natal Surge Tool Kits or useful information</b>  Information provided by Pat Frost, Director of Emergency Medical Services, Contra Costa Health Services	<ol style="list-style-type: none"> <li>1. Contra Costa County Neonatal and Pediatric Disaster Toolkit (as an example to show how this can be done)</li> <li>2. Children's LA Disaster Pediatric Emergency Decision Support System (PEDSS) Logistics Tool for the actual surge calculators and tools to do the projections <a href="http://www.chladisastercenter.org/site/c.ntJYJ6MLIsE/b.3569369/k.BB83/PEDSS.htm">http://www.chladisastercenter.org/site/c.ntJYJ6MLIsE/b.3569369/k.BB83/PEDSS.htm</a> the actual tool is at <a href="http://pedss.isi.edu/pedss/">http://pedss.isi.edu/pedss/</a>.</li> <li>3. Kidsdata.org for the easy accessible data to get started <a href="http://kidsdata.org/">http://kidsdata.org/</a></li> <li>4. <a href="https://sites.google.com/site/pedineonetwork/">https://sites.google.com/site/pedineonetwork/</a></li> <li>5. OSHPD Hospital Bed capacity information (which always has to be validated locally to understand the real capability of the hospitals)</li> <li>6. Bed capacity analysis done in 2011 by the Coalition which needs to have some corrections and updating prior to making available, but this is what helped us figure this out.</li> <li>7. Marianne Gausche data from her pediatric readiness study would also help <a href="http://www.pediatricreadiness.org/">http://www.pediatricreadiness.org/</a></li> <li>8. EMSA has a Regional Trauma Care Commission Data form that has useful information including pediatrics information but again would need to get the most recent version from the EMS Authority.</li> </ol>

*FY 17-18 HPP Work Plan*

12	Healthcare Coalition Tier 1	Tier 1: Management of Individual Healthcare Assets <a href="http://www.phe.gov/Preparedness/planning/mscc/handbook/chapter2/Pages/default.aspx">http://www.phe.gov/Preparedness/planning/mscc/handbook/chapter2/Pages/default.aspx</a>
	Healthcare Coalition Tier 2	Tier 2: Management of Healthcare Coalition <a href="http://www.phe.gov/Preparedness/planning/mscc/handbook/chapter3/Pages/default.aspx">http://www.phe.gov/Preparedness/planning/mscc/handbook/chapter3/Pages/default.aspx</a>
	Healthcare Coalition Tier 3	Tier 3: Jurisdiction Incident Management <a href="http://www.phe.gov/Preparedness/planning/mscc/handbook/chapter4/Pages/default.aspx">http://www.phe.gov/Preparedness/planning/mscc/handbook/chapter4/Pages/default.aspx</a>

HPP Budget FY17-18

**FY 17/18 HPP Budget**

Date: **5/12/2017**

<b>Entity Name: Mono County</b>	
<b>Allocation:</b>	<b>\$113,605</b>
<b>Indirect Cost based on:</b>	<b>Personnel</b>
<b>Personnel Costs Rate</b>	<b>25.0%</b>
<b>Direct Costs Rate</b>	

*See Indirect Cost Rate tab*

<b>Budget Category</b>	<b>BUDGET</b>	
	<b>Total</b>	<b>% Allocation</b>
Personnel	\$52,246.32	46%
Fringe	\$34,583.00	30%
Operating Expenses	\$3,390.35	3%
Equipment	\$0.00	0%
In State Travel	\$983.00	1%
Out of State Travel	\$0.00	0%
Subcontracts	\$0.00	0%
Other Costs	\$695.00	1%
<b>Total Direct</b>	<b>\$91,897.67</b>	<b>81%</b>
<b>Indirect Cost (\$)</b>	<b>\$21,707.33</b>	
<b>Total Expenditures</b>	<b>\$113,605.00</b>	
<b>Payment Balance</b>	<b>\$0.00</b>	
<b>Balance</b>	<b>\$0.00</b>	

HPP Budget FY17-18

2017 - 2018 PROJECT BUDGET		ASPR HPP Funds			Capability	Obj.	Facility	Budget Justidication
Personnel		FTE	Salary	Cost				
UID	Position Title and Name of personnel in that position							
	Public Health Officer - Richard Johnson, M.D.				Foundation for Healthcare and Medical Readiness	1	A	Coalition Coordinator - The Health Officer facilitates, develops, and directs all Pan Flu and HPP activities. Dr. Johnson is employed as a part-time Health Officer. Additional hours are funded by the grants, and subject to the availability of funds. Continuous time studies are used to track time in the different programs and grants. Fractional positions exist solely to support program operations. No other funding exists to support program activities related to this budget.
HP101	Emergency Preparedness Manager - Debra Diaz	12%	\$ 165,911	\$19,909	Healthcare and Medical Response Coordination	1	A	HPP Coordinator - The Emergency Preparedness Coordinator oversees all staff education and training, and assists the Health Officer in managing all grant activities, focusing on at-risk populations, CAHAN, and DHV.
HP102		50%	\$ 64,674	\$32,337				
HP103			\$ -	\$0				
HP104			\$ -	\$0				
HP105			\$ -	\$0				
HP106			\$ -	\$0				
HP107			\$ -	\$0				
HP108			\$ -	\$0				
HP109			\$ -	\$0				
HP110			\$ -	\$0				
HP111			\$ -	\$0				
HP112			\$ -	\$0				
HP113			\$ -	\$0				
HP114			\$ -	\$0				
HP115			\$ -	\$0				
HP116			\$ -	\$0				
HP117			\$ -	\$0				
HP118			\$ -	\$0				
HP119			\$ -	\$0				
HP120			\$ -	\$0				
HP121			\$ -	\$0				
HP122			\$ -	\$0				
HP123			\$ -	\$0				
HP124			\$ -	\$0				
HP125			\$ -	\$0				
				<b>\$52,246</b>				
<b>Fringe Benefits</b>		<b>%</b>						
		<b>66.19%</b>	<b>\$34,583</b>					
<b>Subtotal Personnel and Fringe</b>				<b>\$86,829</b>				

HPP Budget FY17-18

UID	Operating Expenses	Cost	Capability	Obj.	Facility	Budget Justification
	Communication Services		Healthcare and Medical Response Coordination	2	B	Monthly subscription charges for satellite phone and ATT Go Phone service. Satellite phone and ATT Go Phone service provides Mammoth Hospital with the capability to communicate, internally and externally with the MHOAC, when other forms of communication are compromised.
HOE101		\$3,390				
HOE102		\$0				
HOE103		\$0				
HOE104		\$0				
HOE105		\$0				
HOE106		\$0				
HOE107		\$0				
HOE108		\$0				
HOE109		\$0				
HOE110		\$0				
HOE111		\$0				
HOE112		\$0				
HOE113		\$0				
HOE114		\$0				
HOE115		\$0				
HOE116		\$0				
HOE117		\$0				
HOE118		\$0				
HOE119		\$0				
HOE120		\$0				
<b>Operating Expenses Subtotal</b>		<b>\$3,390</b>				

# HPP Budget FY17-18

UID	Equipment (Minor/Major)	Quantity	Unit Price	Total	Capability	Obj.	Facility	Budget Justification
HE101				\$0				
HE102				\$0				
HE103				\$0				
HE104				\$0				
HE105				\$0				
HE106				\$0				
HE107				\$0				
HE108				\$0				
HE109				\$0				
HE110				\$0				
HE111				\$0				
HE112				\$0				
HE113				\$0				
HE114				\$0				
HE115				\$0				
HE116				\$0				
<b>Equipment Subtotal</b>				<b>\$0</b>				

HPP Budget FY17-18

UID	In State Travel/Per Diem		Total	Capability	Obj.	Facility	Budget Justification
	2017 CHA Annual Conference			Foundation for Healthcare and Medical Readiness	1	B	Per diem, mileage and lodging expenses for a key member of the Mammoth Hospital Disaster Preparedness Committee (also essential member of the Mono County Healthcare Coalition) to attend the annual CHA Conference in Sacramento in Sep 2017.
HT101			\$983				
HT102			\$0				
HT103			\$0				
HT104			\$0				
	<b>In State Travel/Per Diem Subtotal</b>		<b>\$983</b>				
UID	Out of State Travel/Per Diem		Total	Capability	Obj.	Facility	Budget Justification
HT105			\$0				
HT106			\$0				
HT107			\$0				
	<b>Out of State Travel/Per Diem Subtotal</b>		<b>\$0</b>				

# HPP Budget FY17-18

	Subcontracts		Total	Capability	Obj.	Facility	Budget Justification
HC101			\$0				
HC102			\$0				
HC103			\$0				
HC104			\$0				
HC105			\$0				
HC106			\$0				
HC107			\$0				
HC108			\$0				
HC109			\$0				
HC110			\$0				
HC111			\$0				
	<b>Subcontract Subtotal</b>		<b>\$0</b>				

HPP Budget FY17-18

UID	Other Costs	Total	Capability	Obj.	Facility	Budget Justification
	<b>Software and Licenses</b>	<b>\$0</b>				
HO101		\$0				
HO102		\$0				
HO103		\$0				
HO104		\$0				
HO105		\$0				
HO106		\$0				
	<b>Training</b>	<b>\$695</b>				
HO107	2017 CHA Annual Conference	\$695	Foundation for Healthcare and Medical Readiness	1	B	Registration expense for a key member of the Mammoth Hospital Disaster Preparedness Committee (also essential member of the Mono County Healthcare Coalition) to attend the annual CHA conference in Sacramento in Sep 2017.
HO108		\$0				
HO109		\$0				
HO110		\$0				
HO111		\$0				
HO112		\$0				
HO113		\$0				
HO114		\$0				
	<b>Exercise Materials</b>	<b>\$0</b>				
HO115		\$0				
HO116		\$0				
HO117		\$0				
HO118		\$0				
HO119		\$0				
	<b>Maintenance Agreements</b>	<b>\$0</b>				
HO120		\$0				
HO121		\$0				
HO122		\$0				
HO123		\$0				
HO124		\$0				
	<b>Other Costs Subtotal</b>	<b>\$695</b>				
	<b>Total Direct Costs</b>	<b>\$91,898</b>				
	<b>Total Indirect Costs</b>	<b>\$21,707</b>				
	<b>Total Costs</b>	<b>\$113,605</b>				

Local Entity	Indirect Cost Rate	
	Personnel Cost	Direct Cost
Alameda		11.18%
Alpine		15.00%
Amador	25.00%	
Berkeley (City of)		14.43%
Butte	25.00%	
Calaveras	25.00%	
Colusa	25.00%	
Contra Costa	11.10%	
Del Norte	25.00%	
El Dorado	25.00%	
Fresno	25.00%	
Glenn	24.71%	
Humboldt	25.00%	
Imperial	25.00%	
Inyo	25.00%	
Kern	25.00%	
Kings	25.00%	
Lake	25.00%	
Lassen	25.00%	
Long Beach (City of)	20.47%	
Los Angeles	19.91%	
Madera	25.00%	
Marin	25.00%	
Mariposa	10.00%	
Mendocino	25.00%	
Merced	25.00%	
Modoc	22.79%	
Mono	25.00%	
Monterey	25.00%	
Napa	25.00%	
Nevada	25.00%	
Orange	19.85%	
Pasadena (City of)	19.45%	
Placer	25.00%	
Plumas	25.00%	
Riverside	25.00%	
Sacramento	14.48%	
San Benito	25.00%	
San Bernardino	15.62%	
San Diego	25.00%	
San Francisco	25.00%	
San Joaquin	25.00%	
San Luis Obispo	20.08%	
San Mateo	20.35%	
Santa Barbara	23.52%	
Santa Clara	25.00%	
Santa Cruz	20.04%	

Shasta	25.00%	
Sierra	25.00%	
Siskiyou	11.05%	
Solano		15.00%
Sonoma	23.39%	
Stanislaus	25.00%	
Sutter	25.00%	
Tehama	25.00%	
Trinity	25.00%	
Tulare	15.31%	
Tuolumne	25.00%	
Ventura	14.31%	
Yolo	25.00%	
Yuba	25.00%	

# Facilities

UID	Facility Name
A	Mono County Public Health Department
B	Mammoth Hospital
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UID	Facility Name
AA	
BB	
CC	
DD	
EE	
FF	
GG	
HH	
II	
JJ	
KK	
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MM	
NN	
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PP	
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SS	
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Mono County  
**Capability 1 - Community Preparedness**

**Goal:**  
Local Health Departments will engage partners to review and update the jurisdiction's public health and medical risk assessment to prioritize or validate the top three hazards with the highest impact on public health, medical, behavioral health systems and environmental health with an emphasis on at-risk populations.

**Known Gaps:**  
Further development of evacuation plans for at-risk populations needs to occur. We continue to have minimal participation from Behavioral Health in preparedness activities.

Please indicate what year you will complete a **Jurisdictional Risk Assessment** in the yellow highlighted cell using the dropdown menu.

**FY2018-19**

Mono County

<b>Objective 1</b> (Domain 1, Activity 2/Function 1)		<b>Est. Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
In coordination with the HPP program, update jurisdictional top three hazards/risks and identify gaps in readiness to respond for hazards/risks most likely to occur in the jurisdiction with the highest impact on public health, medical, behavioral health, environmental health and tribal entities in coordination with the Healthcare Coalition and other stakeholders.		Q4	Richard Johnson	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
				Objective			
<b>Activities</b>		<b>Activities</b>					
1	Public Health will conduct its annual review and update of the Mono County Public Health 2011 Hazard Risk Assessment (HRA) with HPP partners in the Unified Command. (Notes 2, 4, and 6)	Q3	Richard Johnson				
2	Public Health will conduct its annual review and update of the Mono County Public Health 2011 Hazard Risk Assessment (HRA) with HPP partners in the Emergency Medical Care Committee. (Notes 2, 4, and 6)	Q3	Richard Johnson				
3	Public Health will conduct its annual review and update of the Mono County Public Health 2011 Hazard Risk Assessment (HRA) with HPP partners in the Mammoth Hospital Disaster Committee. (Notes 2, 4, and 6)	Q2	Richard Johnson				
4	Public Health will continue to enhance its "Mono Healthcare Coalition Matrix: Member Roles And Responsibilities" document, which reflects the top three hazards and identified gaps in readiness for each of 13 organizational types, including public health, medical, behavioral health, environmental health, and tribal entities. (Note 2)	Q4	Richard Johnson				
5	Public Health will enhance its "Mono Healthcare Coalition Matrix", the Mono County MHOAC Program Manual, and the Public Health Department Operations Plan (DOP) to include behavioral health impact and preparedness for the public and responders. (Note 2)	Q4	Richard Johnson				
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<b>Required</b>		<b>Deliverable(s)</b>					

Mono County

<b>Deliverable</b>	1) Updated jurisdictional public health risk assessment which includes behavioral health impact and preparedness for the public and responders. 2) Documentation of participation in jurisdictional public health risk assessment by Healthcare Coalition and other stakeholders.				
<b>Notes:</b>					

Mono County

<b>Objective 2</b> (Domain 2, Activity 3/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
Continue to participate in local evacuation planning with local OES to: -Include public health and medical issues related to at-risk populations -Develop plans -Sustain coordination with Healthcare Coalition Partners, stakeholders and local emergency management partners -Work with other stakeholders and agencies to address the needs of at-risk population (including such as Home Health Agencies, Social Services, CCS, Behavior Health and HHS emPOWER mapping) -Plans should include messaging, evacuation, and transportation							
		Q3	Deb Diaz				
<b>Activities</b>		<b>Activities</b>					
1	The Health Officer will participate in the completion of a final Patient Movement Plan with CDPH and EMSA. (Note 2)	Q1	Richard Johnson				
2	The Health Officer will ensure that the Mono MHOAC Program Manual includes necessary information regarding messaging, evacuation, and transportation of at-risk populations. (Note 2)	Q1	Richard Johnson				
3	The Health Officer will review the Mono County Emergency Operations Plan (EOP) and the Public Health DOP for consistency with the above newly developed plans, and make recommendations for any revisions or additions regarding local evacuation of at-risk populations. (Note 2)	Q1	Richard Johnson				
4	Public Health will meet with local OES and agencies serving at-risk populations to ensure coordination of messaging, evacuation, and transportation of at-risk populations in any event. (Note 4)	Q3	Deb Diaz				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Documentation of local evacuation planning meetings with local emergency management at-risk population agencies/organizations.						

Mono County

**Notes:**

Mono County

<b>Objective 3</b> (Domain 1, Activity 3/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Test community resilience in an exercise or real event, choose a minimum of two of the eleven community partners (Note 7) where there are gaps and test based on the jurisdictional public health risk assessment.	<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
	<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
Objective						
	Q3	Deb Diaz				
Activities						
1	Public Health will select and meet with 2 community sectors (Note 7) where there are gaps, and based on one of the top 3 identified hazards, plan an activity (Note 3) that will include the ID and/or prioritization of vulnerable populations (Note 10), demonstrating community resilience.	Q3	Deb Diaz			
2	Public Health will conduct the selected activity with one of the partners. (Note 3, 7, and 10)	Q3	Deb Diaz			
3	Public Health will conduct the selected activity with the other of the two selected partners (Note 3, 7, and 10)	Q3	Deb Diaz			
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Deliverable(s)						
<b>Required Deliverable</b>	1) An AAR from a real event, exercise, workshop or agendas/minutes from a community partner meeting which improved community resilience. 2) Documentation of community partnership meetings and identification and/or prioritization of vulnerable populations demonstrating community resilience.					
<b>Notes:</b>						

Mono County

Objective 4 (Domain 1, Activity 4/Function 4) Contribute to community preparedness by providing or make available training on the EOM, to public, private, and community partners.		Est.	Mid-Year Report		Year End Report		
		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
		Q1	Richard Johnson				
Activities		Activities					
1	Once the revised EOM is available, the Health Officer (MHOAC) will conduct a training at the Mono County Unified Command, which includes public, private, and community partners. (Note 9)	Q1	Richard Johnson				
2	Once the revised EOM is available, the Health Officer (MHOAC) will conduct a training at the Emergency Medical Care Committee, which includes public, private, and community partners. (Note 9)	Q1	Richard Johnson				
3	Once the revised EOM is available, the Health Officer (MHOAC) will conduct a training at the Mammoth Hospital Disaster Committee. (Note 9)	Q1	Richard Johnson				
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Required Deliverable	Deliverable(s)						
	1) Documentation of EOM workshop(s), trainings, and/or table top with community partners.						
Notes:							

Mono County

<b>Objective 5</b> (Domain 1, Activity 4/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Provide training or make available training on how the MHOAC Program coordinates with Behavioral Health in preparedness, response, and recovery to public, private, and community partners.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q3	Richard Johnson				
<b>Activities</b>		Activities				
1	The MHOAC (Health Officer) will meet with Behavioral Health and create a Behavioral Health Concept of Operations (COOP) to include in the Public Health DOP and/or the MHOAC Program Manual. (Note 2)	Q1	Richard Johnson			
2	The MHOAC will provide training on said COOP to the Unified Command, which includes public, private, and community partners. (Note 9)	Q3	Richard Johnson			
3	The MHOAC will provide training on said COOP to the Emergency Medical Care Committee, which includes public, private, and community partners. (Note 9)	Q3	Richard Johnson			
4	The MHOAC will provide training on said COOP to the Mammoth Hospital Disaster Committee. (Note 9)	Q3	Richard Johnson			
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<b>Required Deliverable</b>	Deliverable(s)					
	1) Documentation of MHOAC workshop(s), trainings, and/or table top with community partners.					
<b>Notes:</b>						

Mono County

<b>Objective 6</b> (Domain 1, Activity 4/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Engage tribal entities in public health preparedness activities and exercises and include their input into programmatic content and implementation of jurisdictional public health emergency preparedness and response plans (for example: advisory committees or similar organizational approaches).		<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
		<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	We will maintain updated and current contact lists for key persons in the Toiyabe Indian Health Project (TIHP), which represents all of the recognized tribes in Mono County. (Note 3)	Q4	Deb Diaz				
2	We will include TIHP personnel in all communications (e.g., Mono-Grams) on a day-to-day basis. (Note 3)	Q4	Richard Johnson				
3	We will include TIHP in the Statewide Medical and Health Exercise (SWMHE) Planning meeting. (Notes 1 and 4)	Q1	Deb Diaz				
4	We will include TIHP in the SWMHE (tabletop). (Note 1)	Q2	Deb Diaz				
5	We will include TIHP in the SWMHE (functional). (Note 1)	Q2	Deb Diaz				
6	We will continue to include TIHP in our trainings offered at the quarterly Unified Command meetings, which they attend. (Note 4)	Q4	Richard Johnson				
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<b>Required Deliverable</b>		Deliverable(s)					
	1) List of outreach efforts and documented materials used for outreach to Tribal entities to participate in community preparedness.						
<b>Notes:</b>							

Mono County

**Capability 2: Community Recovery**

**Goal:**

Local Health Departments will have plans in place to rebuild public health, environmental, medical, and behavioral health systems to at least a level of functioning comparable to pre-incident levels.

**Known Gaps:**

Since this has been a low priority area, little work has been done to engage our partners and stakeholders in recovery activities.

Mono County

<b>Objective 1</b> (Domain 1, Activity 3/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Review and update Public Health continuity plans based on real events, exercise and improvement plans to address gaps identified. (Refer to PHEP Capability Guide, page 23)	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q4	Richard Johnson				
<b>Activities</b>		Activities				
1	Public Health will review the continuity chapter in the Public Health DOP to identify any gaps based on real events, exercises, and improvement plans. (Note 2) (See bulleted list on p. 23 of the March 2011 PH Preparedness Capabilities document)	Q1	Richard Johnson			
2	Public Health will revise/enhance the continuity chapter to address the identified gaps. (Note 2)	Q2	Richard Johnson			
3	Public Health will train public health staff on the continuity plan. (Note 9)	Q3	Richard Johnson			
4	The MHOAC will work with Region VI partners to produce a new Region VI Med/Health Mutual Aid Agreement. (Note 2)	Q4	Richard Johnson			
5	The MHOAC will work to obtain approval of the new Region VI Med/Health Mutual Aid Agreement from the necessary authorities (TBD, e.g., Health Officer, MHOAC, Health Director, Board of Supervisors, etc.) (Note 2)	Q4	Richard Johnson			
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<b>Required Deliverable</b>	Deliverable(s)					
	1) Documentation of identified gaps in continuity planning. 2) Improvement Plan(s) from real event(s) and/or exercise(s) which improve Public Health continuity plan(s), or updated continuity resource guide. 3) Developed or updated Public Health Continuity of Operations Plan.					
<b>Notes:</b>						

Mono County

<b>Objective 2</b> (Domain 1, Activity 4/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Share recovery planning efforts with local Emergency Management in order to meet public health's community recovery from physical, behavioral injury, illness, or exposure sustained during an incident.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q4	Richard Johnson				
<b>Activities</b>		<b>Activities</b>					
1	Public Health will review the Mono County EOP for elements related to public health's community recovery from physical, behavioral, injury, illness, or exposure, especially as it relates to the functional needs of at-risk populations. (Note 2)	Q1	Richard Johnson				
2	Public Health will review the Mono County MHOAC Program Manual for elements related to public health's community recovery from physical, behavioral, injury, illness, or exposure, especially as it relates to the functional needs of at-risk populations. (Notes 2 and 10)	Q1	Richard Johnson				
3	Public Health will review the Public Health DOP for elements related to public health's community recovery from physical, behavioral, injury, illness, or exposure, especially as it relates to the functional needs of at-risk populations. (Notes 2 and 10)	Q1	Richard Johnson				
4	Public Health will review the Region VI Med/Health Mutual Aid Agreement for elements related to public health's community recovery from physical, behavioral, injury, illness, or exposure, especially as it relates to the functional needs of at-risk populations. (Notes 2 and 10)	Q3	Richard Johnson				
5	Public Health will meet with local OES to review said documents for consistency and to identify gaps in plans to meet community needs (Notes 2 and 4)	Q3	Richard Johnson				
6	Public Health and OES will make recommendations for revisions to above plans in order to fill identified gaps. (Note 2)	Q3	Richard Johnson				
7	Public Health will revise the DOP and MHOAC Program Manual based on above recommendations. (Note 2)	Q3	Richard Johnson				
8	Public Health will work with partners to create a draft resource guide on community recovery needs. (Note 2)	Q4	Richard Johnson				
9							
10							

Mono County

Required	Deliverable(s)				
<b>Deliverable</b>	1) Documentation of recovery planning efforts with local emergency management (i.e. meeting minutes, workshops, trainings, etc.) 2) Update resource guide on community recovery needs.				
<b>Notes:</b>					

Mono County

<b>Objective 3</b> (Domain 1, Activity 4/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Collaborate with community partners (Note 7) to identify public and private mental/behavioral health organizations, environmental health and medical services that would be available within the community during and after an incident in order to meet the communities recovery needs.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
				Objective			
		Q4	Deb Diaz				
<b>Activities</b>		<b>Activities</b>					
1	Public Health will work with partners in each sector to generate a list of public and private organizations potentially available to meet the recovery needs of Mono County. (Note 7)	Q2	Deb Diaz				
2	Public Health will present a training at Unified Command addressing community recovery. (Note 4)	Q3	Deb Diaz				
3	Public Health will work with partners to identify gaps in community recovery. (Note 2)	Q4	Deb Diaz				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Documentation of community meetings, workshop(s), training(s), or improvement plans address community recovery. 2) Identified gaps in community recovery in your jurisdiction.						
<b>Notes:</b>							

Mono County

<b>Objective 4</b> (Domain 2, Activity 1/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Maintain All Hazards Emergency Preparedness and Response Plans for public health and medical and receive continuous input from local emergency management, stakeholders, tribal entities, health care delivery system, environmental and behavioral health and the public including members of at-risk populations.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q3	Richard Johnson				
<b>Activities</b>		Activities				
1	Public Health will maintain a Mono County MHOAC Program Manual, which is or references other plans which together comprise the Mono County "All Hazards Emergency Preparedness and Response Plan". (Note 2)	Q1	Richard Johnson			
2	Public Health will provide training to the Unified Command on said plans, and solicit continuous input from entities, including EM, EMS, fire, Toiyabe Indian Health Project (tribal), Mammoth Hospital, EH, BH, and agencies serving at-risk populations. (Notes 4, 7, 9, nd 10)	Q3	Richard Johnson			
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<b>Required Deliverable</b>		Deliverable(s)				
	1) Updated All Hazards Emergency Preparedness and Response Plans for public health and medical. 2) Documentation of participation from local emergency management and other stakeholders, such as: tribal entities, health care delivery system, the public including members of at-risk populations.					
<b>Notes:</b>						

Mono County

**Capability 3: Emergency Operations Coordination**

**Goal:**

Local Health Departments will strengthen the public health and medical response system by updating plans, policies, and procedures to address public, environmental, behavioral health functions of the Medical and Health Operational area coordinator (MHOAC) program.

**Known Gaps:**

Due to staff turnover, we have trained alternate MHOACs at the moment.

Mono County

<b>Objective 1</b> (Domain 2, Activity 1/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Maintain a sufficient number of public health response personnel trained to the CDC definition of Responder Training levels Tier 1-4 to meet the needs of the jurisdiction during an unusual event and emergency system activation.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	
	Objective						
	Q4	Deb Diaz					
<b>Activities</b>		Activities					
1	Maintain current training records for all Public Health response personnel. (Note 9)	Q1	Deb Diaz				
2	Maintain a roster of persons potentially assigned to a public health DOC, with redundancy in each position. (Note 9)	Q1	Deb Diaz				
3	Provide or provide access to required training to meet the goal as stated. (Note 9)	Q4	Deb Diaz				
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<b>Required Deliverable</b>	Deliverable(s)						
	1) Training records of public health response personnel (Documentation)						
<b>Notes:</b>							

Mono County

<b>Objective 2</b> (Domain 2, Activity 1/Function 1 & 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Continue Integration with environmental health, mental/behavioral health and HCC into the public health emergency planning and response structure utilizing the MHOAC and working with local Office of Emergency Services (OES).	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q4	Richard Johnson				
<b>Activities</b>		<b>Activities</b>				
1	Review and update (as necessary) the Public Health DOP to ensure planning and response structure includes MHOAC, EH, BH, HCC, local OES, Toiyabe Indian Health Project, EMS, Mammoth Hospital, and at-risk populations. (Notes 2 and 8)	Q1	Richard Johnson			
2	Review and update (as necessary) the MHOAC Program Manual to ensure planning and response structure includes MHOAC, EH, BH, HCC, local OES, Toiyabe Indian Health Project, EMS, Mammoth Hospital, and at-risk populations. (Notes 2 and 8)	Q1	Richard Johnson			
3	Review and make recommendations to update (as necessary) the Mono County EOP to ensure planning and response structure includes MHOAC, EH, BH, HCC, local OES, Toiyabe Indian Health Project, EMS, Mammoth Hospital, and at-risk populations. (Notes 2 and 8)	Q2	Richard Johnson			
4	Provide updates and appropriate training on these 3 plans at 1st quarter Unified Command meeting. (Note 4)	Q1	Richard Johnson			
5	Provide updates and appropriate training on these 3 plans at 2nd quarter Unified Command meeting. (Note 4)	Q2	Richard Johnson			
6	Provide updates and appropriate training on these 3 plans at 3rd quarter Unified Command meeting. (Note 4)	Q3	Richard Johnson			
7	Provide updates and appropriate training on these 3 plans at 4th quarter Unified Command meeting. (Note 4)	Q4	Richard Johnson			
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9						
10						
<b>Required</b>		<b>Deliverable(s)</b>				

Mono County

<b>Deliverable</b>	1) Documentation of public health and medical's role in the O/A's overall emergency management structure and it reflects public health and medical role in O/A plan, annex or organization structure. 2) Documentation of participation from local emergency management and other stakeholders, such as: tribal entities, health care delivery system, the public including members of at-risk populations.				
<b>Notes:</b>					

Mono County

<b>Objective 3</b> (Domain 2, Activity 2/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Create documentation (i.e. just-in-time training, staffing schedule, etc.) for staffing a minimum level of General and Command staff for the DOC/EOC covering a minimum of 72 hours.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q4	Deb Diaz				
<b>Activities</b>						
1	Public Health will maintain a roster of trained personnel for staffing a public health DOC with Command and General Staff, and staffing a Med/Health Branch of an OA EOC, for at least 72 hours. (Note 2 and 8)	Q4	Deb Diaz			
2	Public Health will review and update Job Action Sheets for each of the Command and General Staff positions in the DOC, and a Med/Health Branch in an OA EOC(Note 9)	Q1	Deb Diaz			
3	The MHOAC will work with Region 6 partners to complete a Region 6 Med/Health Mutual Aid Agreement. (Notes 2 and 8)	Q3	Richard Johnson			
4	Public Health will provide training to all identified staff who potentially might fill Command and/or General staff positions in a public health DOC or a Med/Health Branch of an OA EOC. (Note 9)	Q2	Richard Johnson			
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<b>Required Deliverable</b>						
	1) Developed/updated Job action sheet to correspond to the skills and actions necessary to fulfill identified roles in the department's DOC/EOC or Medical and Health branch of O/A's EOC. 2) Documentation to staff a minimum level of General and Command staff for the DOC/EOC to cover a minimum of 72 hours, which may include a request for mutual aid. 3) Maintain a list of trained personnel.					
<b>Notes:</b>						

Mono County

<b>Objective 4</b> (Domain 2, Activity 4/Function 3 & 4)		Est.	Mid-Year Report		Year End Report		
Review updated State MHOAC guide and update county's MHOAC guide in coordination with partners of the 17 MHOAC functions.		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
		Q3	Richard Johnson				
<b>Activities</b>		<b>Activities</b>					
1	The Health Officer will provide training to alternate MHOACs on the Mono County MHOAC Program Manual. (Note 9)	Q1	Richard Johnson				
2	The Health Officer will provide training to Unified Command on the Mono County MHOAC Program Manual. (Note 9)	Q1	Richard Johnson				
3	The Health Officer will provide training to the Mammoth Hospital Disaster Committee on the Mono County MHOAC Program Manual. (Note 9)	Q1	Richard Johnson				
4	The Health Officer will provide training to the Emergency Medical Care Committee on the Mono County MHOAC Program Manual. (Note 9)	Q1	Richard Johnson				
5	The MHOAC Program will maintain the ability to use an Excel file for tracking public health and medical resources through the MHOAC Program. (Note 8)	Q4	Deb Diaz				
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Required Deliverable	Deliverable(s)						
	1) Reviewed State MHOAC guide 2) Updated local MHOAC guide 3) Documented process for tracking public health and medical resources through the MHOAC program.						
Notes:							

Mono County

<b>Objective 5</b> (Domain 2, Activity 2/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Finalize a process for demobilizing resources at the end of an activation in coordination with the MHOAC, including public health, medical, mental/behavioral and environmental health.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q3	Richard Johnson				
<b>Activities</b>		<b>Activities</b>					
1	The MHOAC Program will include in the MHOAC Program Manual a plan for demobilizing med/health resources at the end of an activation, to include public health, medical, BH, and EH resources. (Notes 2 and 8)	Q3	Richard Johnson				
2	The process will be reviewed with the Emergency Medical Care Committee, and revised as necessary (Notes 2, 4, and 8)	Q3	Richard Johnson				
3	The process will be reviewed with the Mammoth Hospital Disaster Committee, and revised as necessary (Notes 2, 4, and 8)		Richard Johnson				
4	The process will be reviewed with the Unified Command, and revised as necessary (Notes 2, 4, and 8)	Q2	Richard Johnson				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Demobilization plan or checklist for the public health and medical O/A resources which includes coordination with the MHOAC guide.						
<b>Notes:</b>							

Mono County

<b>Objective 6</b> (Domain 2, Activity 2/Function 5)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Continue to complete tasks identified in improvement plans and track all improvement plans to completion.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Public Health will review and refine the process for tracking, monitoring, and completing improvement items identified in AAR/IPs (Note 2)	Q1	Deb Diaz				
2	Public Health will review and track progress toward completion of improvement plan items from AAR/IP's as assigned to various partners at the beginning of every quarter. (Note 3)	Q4	Deb Diaz				
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<b>Required Deliverable</b>		Deliverable(s)					
	1) Documented process for tracking Improvement plans. 2) Documentation that tasks identified for improvement are being completed.						
<b>Notes:</b>							

Mono County

**Capability 4: Emergency Public Information and Warning**

**Goal:**

Local Health Departments will strengthen the ability to develop, coordinate, and disseminate information, alerts, warnings, and notifications to the public and incident management responders.

**Known Gaps:**

There are known gaps in our ability to outreach to all of the 11 sectors, including faith-based and behavioral health. Our CERC Plan needs to be enhanced and updated to reflect current policy, procedures, and technology. Templates need to be added for the top three hazards.

Mono County

<b>Objective 1</b> (Domain 3, Activity 3/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Sustain ability to activate the emergency public information system during a real event or exercises, to test the call down list for pre-identified staff to participate in public information.		<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>
		<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>	<i>(Describe in Notes)</i>
		Objective				
		Q4	Deb Diaz			
<b>Activities</b>		<b>Activities</b>				
1	Review and update if necessary, the PH DOP to ensure inclusion of current procedure to activate the PH public information system. (Note 2)	Q1	Richard Johnson			
2	Review and update if necessary, the PH DOP to ensure inclusion of current procedure to integrate PH PIO function with the OA EOC and PIO when activated.. (Note 2)	Q1	Richard Johnson			
3	Ensure primary PH PIO and back-up have the training as recommended by federal guidelines. (Note 9)	Q4	Richard Johnson			
4	Document the exercising/real event activation of PH public information function. (Note 1)	Q4	Deb Diaz			
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<b>Required Deliverable</b>		<b>Deliverable(s)</b>				
	1) Documentation of exercising public information during a real event or exercise.					
<b>Notes:</b>						

Mono County

<b>Objective 2</b> (Domain 3, Activity 3/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Test one or more of the following items, a "real event" will meet this objective: - Joint Information Center (JIC) - Public health call down list - Public health media contact list - Ability to track media inquiries  Note: Each element must be tested at least once every 5 years.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q4	Deb Diaz				
<b>Activities</b>							
	1	Conduct an exercise (or real event if occurs) when the PH call down list is tested after hours. (Note 1)	Q4	Deb Diaz			
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<b>Required Deliverable</b>					<b>Deliverable(s)</b>		
		1) Documentation of an exercise or real event that tested one of the following: JIC, public-health call down, public health media contact list, and/or ability to track media inquiries.					
<b>Notes:</b>							

Mono County

<b>Objective 3</b> (Domain 3, Activity 3/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Participate in State monthly PIO conference calls and utilize information to update local public communication plan.		<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Primary Barrier</b>
		<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>	<i>(Describe in Notes)</i>
Objective						
	Q4	Richard Johnson				
<b>Activities</b>		Activities				
1	Document participation in monthly PIO conference calls (Note 4)	Q4	Richard Johnson			
2	Update CERC chapter in the PH DOP. (Note 2)	Q1	Richard Johnson			
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<b>Required Deliverable</b>	Deliverable(s)					
	1) Updated local communication plan.					
<b>Notes:</b>						

Mono County

**Capability 5: Fatality Management**

**Goal:**

Local health departments will identify public health's role during a mass fatality incident which includes stakeholders, determining capacity and impact on the public health and medical system.

**Known Gaps:**

Although we have a draft Fatality Management, it has not been reviewed by the Coroner.

Mono County

<b>Objective 1</b> (Domain 5, Activity 4/Function 1 & 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop or sustain working relationships with lead agency for mass fatality incidents, to determine and document public health's role in mass fatality management.	<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
	<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
Objective						
	Q1	Richard Johnson				
<b>Activities</b>						
	Activities					
1	PH will meet with Coroner or designee to review the PH Mass Fatality Plan. (Note 4)	Q1	Richard Johnson			
2	PH will review the PH Mass Fatality Plan to ensure inclusion of procedures for providing situational awareness and reporting. (Note 2)	Q1	Richard Johnson			
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<b>Required Deliverable</b>						
	1) Documentation of Public Health's participation in mass fatality planning. 2) Update procedures for providing situational awareness and reporting mass fatalities.					
<b>Notes:</b>						

Mono County

<b>Objective 2</b> (Domain 5, Activity 4/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Determine lead agency for opening a Family Assistance Center (FAC) and working with the lead to document Public Health, Behavioral Health and Medical Health Operational Area Coordination's (MHOAC) role in a FAC.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q1	Richard Johnson				
<b>Activities</b>		Activities				
1	Public Health will meet with local OES Emergency Services Coordinator to confirm lead agency designation for opening a FAC. (Note 4)	Q1	Richard Johnson			
2	Public Health will meet with the designated lead agency to document the MHOAC's role in a FAC to coordinate BH services. (Note 4)	Q1	Richard Johnson			
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<b>Required Deliverable</b>	Deliverable(s)					
	1) Documentation of Public Health's role to provide behavioral health to the community during a mass fatality.					
<b>Notes:</b>						

Mono County

<b>Objective 3</b> (Domain 5, Activity 4/Function 5)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Coordinate with partners to collect and report vital records during and after a mass fatality incident.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
	Q1	Richard Johnson					
<b>Activities</b>		<b>Activities</b>					
1	PH will meet with partners (Coroner, Recorder's Office, etc.) to clarify and document PH's role in collecting, reporting, and providing vital records after a mass fatality incident. (Note 4)	Q1	Richard Johnson				
2	PH will include said documentation of PH's role into the PH Mass Fatality Plan. (Note 2)	Q1	Richard Johnson				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Documentation of Public Health's role to collect, report and provide vital records during and after a mass fatality incident.						
<b>Notes:</b>							

Mono County

**Capability 6: Information Sharing**

**Goal:**

Local Health Departments will maintain the ability to obtain and share situational awareness with partners during unusual events and emergency system activations.

**Known Gaps:**

With staff turnover, training and drilling on policy and procedures is on-going.

Mono County

Objective 1 (Domain 3, Activity 2/Function 1)		Est.	Mid-Year Report		Year End Report		
		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Continue to update and maintain public health, environmental health, behavioral health, EMS, fire, law, local Office of Emergency Services (OES) and medical system stakeholder contact information and mode of preferred communication.		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Public Health will review and revise the Information Sharing document, the Field to OA Situational Reporting and Resource Requesting form, and the MHOAC Program Manual, which includes public health, LEMSA, fire, law, OES, and medical stakeholder contact information and mode of preferred communication. (Note 3)	Q1	Richard Johnson				
2	Public Health will update all contact information in these 3 documents at the end of the first quarter. (Note 3)	Q1	Deb Diaz				
3	Public Health will update all contact information in these 3 documents at the end of the second quarter. (Note 3)	Q2	Deb Diaz				
4	Public Health will update all contact information in these 3 documents at the end of the third quarter. (Note 3)	Q3	Deb Diaz				
5	Public Health will update all contact information in these 3 documents at the end of the fourth quarter. (Note 3)	Q4	Deb Diaz				
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<b>Required Deliverable</b>		Deliverable(s)					
1) Documentation of updated contact information of key response partners and stakeholders.							
<b>Notes:</b>							

Mono County

<b>Objective 2</b> (Domain 3, Activity 1/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Train personnel when appropriate on the process of maintaining and updating role based public health directory, stakeholder contact information, situational awareness, and information sharing needs and provide continuing education to ensure the process can be sustained in the event of staff turnover.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	
	Objective						
	Q1	Deb Diaz					
<b>Activities</b>		Activities					
1	PH will review the PH DOP (6/9/17: Department Operations Plan) to ensure current process (6/9/17: to maintain and update a role based public health directory, stakeholder contact information, situational awareness, and information sharing) is maintained. (Note 3)	Q1	Richard Johnson				
2	PH will provide training to redundant designated staff on said process. (Note 9) 6/9/17: This training will occur at monthly regularly scheduled public health and environmental health staff meetings, consisting of didactic presentations, discussion, and tabletop with scenarios in order to engage staff in creative thinking about the issues.	Q1	Deb Diaz				
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<b>Required Deliverable</b>	Deliverable(s)						
	1) Documentation staff trained to maintain contact information of key response partners and stakeholders.						
<b>Notes:</b>							

Mono County

<b>Objective 3</b> (Domain 3, Activity 1/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Test redundant communication modes for sharing of situational awareness with key stakeholders; a real event will meet this objective.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q3	Deb Diaz				
<b>Activities</b>		<b>Activities</b>					
1	The Health Officer will review procedures for using redundant communication modes for sharing situational awareness as stated in the MHOAC Program Manual with partners in the Unified Command, and revise as necessary. (Note 4)	Q1	Richard Johnson				
2	The Health Officer will review procedures for using redundant communication modes for sharing situational awareness as stated in the MHOAC Program Manual with partners in the Emergency Medical Care Committee, and revise as necessary. (Note 4)	Q1	Richard Johnson				
3	The Health Officer will review procedures for using redundant communication modes for sharing situational awareness as stated in the MHOAC Program Manual with partners in the Mammoth Hospital Disaster Committee, and revise as necessary. (Note 4)	Q1	Richard Johnson				
4	PH will test the use of redundant communication modes to share situational awareness with partners as part of an exercise (or real event). AAR will be developed.(Note 1)	Q3	Deb Diaz				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Documentation of meetings and planning efforts to meet the requirement for redundant communication. 2) Documentation of a real event, or exercises including AAR(s).						
<b>Notes:</b>							

Mono County

Mono County

<b>Objective 4</b> (Domain 3, Activity 1/Function 2)		<b>Est.</b>			<b>Mid-Year Report</b>		<b>Year End Report</b>	
Maintain, sustain and participate in CAHAN and complete needed activities to ensure contacts are maintained and up to date based on the alerting needs and size of the county.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	
		Objective						
	Q4	Deb Diaz						
<b>Activities</b>		Activities						
1	PH will complete a quarterly CAHAN drill with all contacts. (Note 1)	Q4	Deb Diaz					
2	PH will participate in all State CAHAN drills. (Note 1)	Q4	Deb Diaz					
3	PH will maintain and keep current all CAHAN accounts and roles. (Note 3)	Q4	Deb Diaz					
4	Primary and back-up Coordinators will complete CAHAN training as needed. (Note 9)	Q4	Deb Diaz					
5	PH will document the use of CAHAN during a drill, exercise, or real event. AAR will be developed. (Note 1)	Q3	Deb Diaz					
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<b>Required Deliverable</b>	1) Completed quarterly CAHAN test and/or drill to all contacts. 2) Participation in State CAHAN drills. 3) Updated CAHAN contact accounts. 4) Coordinators completed CAHAN training as needed. 5) Documentation of using CAHAN during a real incident or drill, including an AAR(s).			Deliverable(s)				
<b>Notes:</b>								

Mono County

**Capability 7: Mass Care**

**Goal:**

Local Health Departments will develop written plans that address the medical needs of sheltered populations during an emergency.

**Known Gaps:**

Public Health has not developed a written plan to address the medical needs of persons in general or medical shelters.

Mono County

Objective 1 (Domain 5, Activity 1/Function 1)		Est.	Mid-Year Report		Year End Report		
Complete and/or update medical shelter plan to include a process for accessing behavioral health services.		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Note This can be a stand-alone plan or integrated into mass care plan.		Objective					
		Q1	Richard Johnson				
Activities		Activities					
1	Public Health will review and revise as necessary the chapter in the PH DOP regarding mass care and medical shelters to include a process for accessing BH services. (Note 2)	Q1	Richard Johnson				
2	6/9/17: Public Health will review the Mental Health Framework produced at the state level, and the new Behavioral Health chapter pending in the revised California Public Health and Medical Emergency Operations Plan (EOM) for any content which should be incorporated into the mass care and shelter section of the Public Health Department Operations Plan (DOP). (Note 2)	Q1	Richard Johnson				
3	6/9/17: Public Health will meet with representative(s) from the Mono County Behavioral Health Department to solicit input into the section on mass care and shelters, and issues of accessing behavioral health resources when necessary. (Note 4)	Q2	Richard Johnson				
4	6/9/17: Public Health will incorporate suggested input from Behavioral Health into the DOP, and provide education to Social Services, to Public Health, and to the MHOAC Program on procedures for accessing behavioral health services in a shelter. (Notes 2, 8, and 9)	Q3	Richard Johnson				
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<b>Required</b>		Deliverable(s)					

Mono County

<b>Deliverable</b>	1) Documentation of behavioral health in shelter plan.				
<b>Notes:</b>					

Mono County

<b>Objective 2</b> (Domain 5, Activity 1/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Update medical shelter plans (including general population and medical shelters) to include pre-identified and assessed sites, and an environmental health assessment tool/checklist, and health screening tool.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
				Q4	Richard Johnson		
<b>Activities</b>		<b>Activities</b>					
1	PH will review the current medical shelter plan to ensure inclusion of pre-identified sites. (Note 2)	Q1	Richard Johnson				
2	PH will review the current medical shelter plan to include a facility resource request template. (Note 2)	Q2	Richard Johnson				
3	PH will review the current medical shelter plan to ensure inclusion of an EH assessment tool. (Note 2)	Q3	Richard Johnson				
4	PH will review the current medical shelter plan to ensure inclusion of a health screening tool. (Note 2)	Q4	Richard Johnson				
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<b>Required Deliverable</b>	1) Documentation of pre-identified shelter sites and a facility resource request template. 2) Environmental Health assessment tool for sheltered populations. 3) Health screening tool for sheltered populations.			<b>Deliverable(s)</b>			
<b>Notes:</b>							

Mono County

<b>Objective 3</b> (Domain 5, Activity 2/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop a plan in coordination with your HCC for the transfer of individuals between shelters and facilities within HCC member facilities during an emergency and after.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q4	Richard Johnson				
<b>Activities</b>		<b>Activities</b>				
1	PH will review the current medical shelter plan to ensure inclusion of a process for transfer of individuals between shelters and HCC member facilities. (Note 2)	Q1	Richard Johnson			
2	6/9/17: Public Health, which is also the MHOAC Program, will create a draft proposal for a process for moving persons between shelters or HCC member facilities. (Note 2)	Q1	Richard Johnson			
3	6/9/17: Public Health will provide the draft plan to the HCC members, requesting their input. (Notes 2 and 3)	Q2	Richard Johnson			
4	6/9/17: Public Health will draft a revised plan based on the above input. (Note 2)	Q3	Richard Johnson			
5	6/9/17: Public Health will provide the revised plan to HCC members, and develop consensus and finally approval on a plan to coordinate the movement of persons between shelters and/or HCC member facilities. (Notes 4 and 8)	Q4	Richard Johnson			
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>					
1) Documentation of a plan, process and/or checklist to transfer individuals between shelters and facilities.						
<b>Notes:</b>						

Mono County

<b>Objective 4</b> (Domain 5, Activity 2/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
<b>Small &amp; Medium Counties</b>		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
Develop or identify a process for conducting surveillance at shelters in coordination with environmental health include both established, "sanctioned" and ad-hoc shelters to identify cases of illness, injury, behavioral health needs, and exposure within mass care populations.		Objective					
	Q4	Richard Johnson					
<b>Activities</b>		<b>Activities</b>					
1	PH will review the current medical shelter plan to ensure inclusion of a surveillance process (in coordination with EH) that identifies cases of illness, injury, BH needs, and exposure. (Note 2)	Q1	Richard Johnson				
2	6/9/17: Public Health will review the current shelter plan for inclusion of a process for conducting surveillance for the required elements. (Note 2)	Q1	Richard Johnson				
3	6/9/17: Public Health will create a draft revised shelter plan which addresses any gaps identified in the review above (Note 2)	Q2	Richard Johnson				
4	6/9/17: Public Health will meet with HCC members and other stakeholders to request input on the draft plan. (Notes 2 and 4)	Q3	Richard Johnson				
5	6/9/17: Public Health will present a revised shelter plan which includes a process for conducting surveillance for the required elements above, develop consensus, and seek approval. (Notes 4 and 8)	Q4	Richard Johnson				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Documentation of a process and/or checklist for conducting shelter surveillance.						
<b>Notes:</b>							

Mono County

Objective 5 (Domain 5, Activity 2/Function 4)		Est.	Mid-Year Report		Year End Report		
Large Counties	Develop a plan to conduct surveillance at locations where the population may congregate (with consideration to chemical, biological or radiological exposure), and behavioral health.	Finish	Staff Lead	Status	Primary Barrier	Status	Primary Barrier
		Date	(first and last name)		(Describe in Notes)		(Describe in Notes)
		Objective					
Activities		Activities					
1	N/A						
2							
3							
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Required Deliverable		Deliverable(s)					
1) Documented surveillance process, tools and/or checklists.							
Notes:							

Mono County

**Capability 8: Medical Countermeasure Dispensing**

**Goal:**

Local Health Departments (LHDs) will meet annual MCM dispensing requirements.

**Known Gaps:**

The AAR/IP from the SWMHE 2015, an anthrax event - items have not been tracked and progress documented.

Mono County

Objective 1 (Domain 4, Activity 1/Function 1)		Est.	Mid-Year Report		Year End Report	
All Counties: Review and update MCM dispensing plan(s) as needed based on gaps identified as part of Operational Readiness Reviews (ORR), exercises, and real world events.	Finish	Staff Lead	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Date	(first and last name)				
Objective						
	Q3	Deb Diaz				
Activities		Activities				
1	Complete the ORR in the required time period. (Note 3)		Deb Diaz			
2	List the gaps identified by the ORR in local plans. (Note 2)		Deb Diaz			
3	Review the AAR/IP from previous exercises involving MCM. (Note 3)	Q1	Deb Diaz			
4	Update/rewrite the MCM Plan based on the above evaluation. (Note 2)	Q3	Deb Diaz			
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Required Deliverable	Deliverable(s)					
	1) Complete an annual review of MCM plan and update/rewrite the plan as required.					
Notes:						

Mono County

Objective 2 (Domain 4, Activity 2/Function 2)		Est.	Mid-Year Report		Year End Report	
All Counties:		Finish	Staff Lead	Status	Primary Barrier	Primary Barrier
Work with HCC members to develop closed points of dispensing (POD) plans for hospitals and health care facilities.		Date	(first and last name)		(Describe in Notes)	(Describe in Notes)
Objective						
	Q3	Deb Diaz				
Activities		Activities				
1	PH will meet with Mammoth Hospital Disaster Committee to develop a closed POD plan. (Note 2)	Q1	Deb Diaz			
2	PH will meet with the Mono County EMS Program to develop a closed POD plan, which will include the 11 volunteer fire departments. (Note 2)	Q2	Deb Diaz			
3	PH will meet with Camp Antelope Clinic of the Toiyabe Indian Health Project to develop a closed POD plan, which will include all military dependents from the US Marines Mountain Warfare Training Center. (Note 2)	Q3	Deb Diaz			
4	PH will meet with Pickel Meadows Clinic of the US Marines Mountain Warfare Training Center to develop a closed POD plan. (Note 2)	Q3	Deb Diaz			
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Required Deliverable		Deliverable(s)				
	1) Minutes of meetings discussing closed POD planning, and/or 2) Consolidated list of facilities with and without closed POD plans and/or 3) Sample closed POD plans.					
Notes:						

Mono County

Objective 3 (Domain 4, Activity 2/Function 4)		Est.	Mid-Year Report		Year End Report	
All Counties: Meet annual MCM drill requirements. CRI counties will submit completed drills to EPO via lhbtprog@cdph.ca.gov and cc EPSU not later than April 15, 2018. Non-CRI counties will submit completed drills to EPO via lhbtprog@cdph.ca.gov and cc EPSU not later than June 30, 2018	Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
	Objective					
	Q3	Deb Diaz				
Activities						
1	PH will complete the staff notification and assembly drill and submit report by 6/30/18. (Note 1)	Q3	Deb Diaz			
2	PH will complete the facility set-up drill and submit report by 6/30/18. (Note 1)	Q3	Deb Diaz			
3	PH will complete the site activation drill and submit report by 6/30/18. (Note 1)	Q3	Deb Diaz			
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Required Deliverable		Deliverable(s)				
All counties must complete and submit a copy of the results of the MCM drills listed below: 1) staff notification and assembly, 2) facility set-up, and 3) site activation						
Notes:						

Mono County

Objective 4 (Domain 4, Activity 1/Function 3)		Est.	Mid-Year Report		Year End Report	
All Counties: Complete and submit POD Standards Data Sheet. CRI counties will submit completed data sheets to EPO via lhbtprog@cdph.ca.gov and cc EPSU not later than April 15, 2018. Non-CRI counties will submit completed data sheets to EPO via lhbtprog@cdph.ca.gov and cc EPSU not later than June 30, 2018	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Objective					
	Q3	Deb Diaz				
Activities						
1	PH will complete and submit the POD Standards Data Sheet by 6/30/18. (Note 8)	Q3	Deb Diaz			
2						
3						
4						
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Deliverable(s)						
Required Deliverable	1) Completed POD Standards Data Sheet.					
Notes:						

Mono County

Objective 5 (Domain 4, Activity 1/Function 3)		Est.	Mid-Year Report		Year End Report	
CRI Counties:	Complete and submit a baseline self-assessment of the county medical countermeasures program using the latest edition of the Medical Countermeasures Operational Readiness Review (MCM ORR) tool by December 31, 2017. The tool will be released July 1, 2017. Submission means to be published at a later date.	Finish	Staff Lead	Status	Primary Barrier	Primary Barrier
		Date	(first and last name)		(Describe in Notes)	(Describe in Notes)
		Objective				
Activities		Activities				
1	N/A					
3						
4						
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Required Deliverable	Deliverable(s)					
	1) Completed MCM ORR tool. Submission means to be published at a later date.					
Notes:						

Mono County

Objective 6 (Domain 4, Activity 1/Function 3)		Est.	Mid-Year Report		Year End Report	
CRI Counties:	Participate in biennial MCM ORRs with CDPH/CDC staff. LHD schedule to be determined prior to July 1, 2017. The new MCM ORR tool will be released July 1, 2017.	Finish	Staff Lead	Status	Primary Barrier	Primary Barrier
		Date	(first and last name)		(Describe in Notes)	(Describe in Notes)
		Objective				
Activities		Activities				
1	N/A					
2						
3						
4						
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Required Deliverable	Deliverable(s)					
	1) Schedule a date for review with EPO 2) Submission of completed MCM ORR self-assessment (10 days prior to date of review)					
Notes:						

Mono County

<b>Objective 7</b> (Domain 4, Activity 3/Function 3)		<b>Est.</b>	<b>Staff Lead</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
<b>All Counties:</b>		<b>Finish Date</b>	<b>(first and last name)</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
					<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
Update and submit an MCM Action Plan twice per budget period (December 31st and June 30th). The action plan shall summarize progress and completed activities in response to areas of improvement identified in the county's most recent MCM ORR. EPO will provide a review of the MCM Action Plan via webinar for LHDs unfamiliar with the plan.		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	PH will submit a completed MCM Action Plan by 12/31/17. (Note 8)	Q2	Deb Diaz				
2	PH will submit a completed MCM Action Plan by 6/30/18. (Note 8)	Q4	Deb Diaz				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Completed MCM Action Plan submitted not later than December 31, 2017. 2) Completed MCM Action Plan submitted not later than June 30, 2018.						
<b>Notes:</b>							

Mono County

Objective 8 (Domain 4, Activity 1/Function 4)		Est.	Mid-Year Report		Year End Report	
All Counties: Sustain CHEMPACK readiness activities through engagement with key partners including HCC, EMS, LHD, first responders, and Emergency Department staff as appropriate. Engagement activities may include presentations, facilitated discussions, call down drills, etc.	Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
	Objective					
	Q3	Rick Johnson				
Activities		Activities				
1	Public Health will review and update the CHEMPACK Plan, including the cross border plans from the California-Nevada Border Counties Coalition, as necessary, including all current contact information. OUTPUT: reviewed/revise/updated plan (Note 2)	Q1	Rick Johnson			
2	Public Health will conduct a training and brief tabletop exercise at a Mammoth Hospital Disaster Committee meeting. (Notes 1 and 9)	Q3	Rick Johnson			
3	Public Health will conduct a training and brief tabletop exercise at an EMCC meeting. (Notes 1 and 9)	Q3	Rick Johnson			
4	Public Health will conduct a training and brief tabletop exercise at an Unified Command meeting. (Notes 1 and 9)	Q3	Rick Johnson			
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Required Deliverable	Deliverable(s)					
	1) Documented engagement activities and rosters of participation.					
Notes:						

Mono County

Objective 9 (Domain 4, Activity 3/Function 1)	Est.	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
	Finish Date		Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>CRI Counties:</b> Begin preparations for and execution of MSA-wide full-scale dispensing exercise. The MSA-wide full-scale dispensing exercise is a project period requirement and activities documented in each budget period should demonstrate progress and in the planning and execution of the exercise.  Complete exercise requirements will be available in the yet to be released 2017-2022 HPP-PHEP Supplemental Guidelines	Objective					
<b>Activities</b>						
N/A						
<b>Required Deliverable</b>						
1) Document HSEEP required meetings, e.g., Concept and Objectives, Initial Planning Conference, Mid-Term Planning Conference and Final Planning Conference. 2) Exercise Documentation, e.g., Exercise Plan, Exercise Evaluation Guide, Master Scenario Events List, After Action Report (AAR) 3) AAR will be submitted via means to be determined, e.g., DCARs or Online Technical Resource and Assistance Center (On-TRAC)						
<b>Notes:</b>						

Mono County

Objective 10 (Domain 4, Activity1/Function 1)	Est.	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
	Finish Date		Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>All Counties:</b> Provide training to HCCs and their members on MCM dispensing plans. Documentation may be through HCC attendance at MCM ORR reviews or briefings provided by the LHD.	Objective					
	Q3	Deb Diaz				
<b>Activities</b>	Activities					
	PH will provide a training on the MCM Dispensing Plan, including closed PODs, to the Unified Command. (Note 9)	Q3	Deb Diaz			
	PH will provide a training on the MCM Dispensing Plan, including closed PODs, to the Emergency Medical Care Committee. (Note 9)	Q3	Deb Diaz			
	PH will provide a training on the MCM Dispensing Plan, including closed PODs, to the Mammoth Hospital Disaster Committee. (Note 9)	Q2	Deb Diaz			
<b>Required Deliverable</b>	Deliverable(s)					
	1) Participation in MCM ORR reviews or, 2) Agenda & attendance rosters from LHD briefings					
<b>Notes:</b>						

Mono County

**Capability 9: Medical Materiel Management and Distribution**

**Goal:**

Local Health Departments (LHDs) will meet annual MCM distribution efforts by continuing to develop, revise, and exercise MCM distribution plans.

**Known Gaps:**

The AAR/IP from the SWMHE 2015, an anthrax event - items have not been tracked and progress documented.

Mono County

Objective 1 (Domain 4, Activity 1/Function 1)		Est.	Mid-Year Report		Year End Report	
All Counties:		Finish	Staff Lead	Status	Primary Barrier	Primary Barrier
Review and update MCM distribution plan(s) as needed based on gaps identified as part of Operational Readiness Reviews (ORR), exercises, and real events.		Date	(first and last name)		(Describe in Notes)	(Describe in Notes)
		Objective				
		Q3	Deb Diaz			
Activities		Activities				
1	Complete the ORR in the required time period. (Note 3)	Q3	Deb Diaz			
2	List the gaps identified by the ORR in local plans. (Note 2)	Q3	Deb Diaz			
3	Review the AAR/IP from previous exercises involving MCM. (Note 3)	Q1	Deb Diaz			
4	Update/rewrite the MCM Plan based on the above evaluation. (Note 2)	Q3	Deb Diaz			
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Required Deliverable	Deliverable(s)					
	1) Reviewed and if required, updated, MCM distribution plans.					
Notes:						

Mono County

<b>Objective 2</b> (Domain 4, Activity 1/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
<b>All Counties:</b>		<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Primary Barrier</b>
Meet annual MCM distribution requirements. Complete and submit the RAND drills listed below not later than June 30, 2018:		<b>Date</b>	<i>(first and last name)</i>	<i>(Describe in Notes)</i>	<i>(Describe in Notes)</i>	<i>(Describe in Notes)</i>
Objective						
		Q3	Deb Diaz			
Activities						
1	PH will complete the staff notification and assembly drill and submit report by 6/30/18. (Note 1)	Q3	Deb Diaz			
2	PH will complete the facility set-up drill and submit report by 6/30/18. (Note 1)	Q3	Deb Diaz			
3	PH will complete the site activation drill and submit report by 6/30/18. (Note 1)	Q3	Deb Diaz			
4	PH will complete the Pick List Assessment Collection Sheet by	Q3	Deb Diaz			
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Deliverable(s)						
<b>Required Deliverable</b>	1) Pick List Assessment Collection Sheet. 2) RSS Staff Call-Down Data Collection Sheet (If applicable). 3) RSS Site Call-Down Data Collection Sheet (If applicable).					
<b>Notes:</b>						

Mono County

Objective 3 (Domain 4, Activity 1/Function)		Est.	Mid-Year Report		Year End Report	
All Counties: Complete and submit local RSS survey spreadsheet on primary and back-up local RSS (if applicable) to CDPH not later than September 30, 2017.	Finish	Staff Lead	Status	Primary Barrier	Status	Primary Barrier
	Date	(first and last name)		(Describe in Notes)		(Describe in Notes)
Objective						
Activities						
1	We do not have an RSS in Mono County. (Note 8)					
2						
3						
4						
5						
6						
7						
8						
9						
10						
Deliverable(s)						
Required Deliverable	1) Completed Local RSS survey(s).					
Notes:						

Mono County

Objective 4 (Domain 4, Activity 2/Function 3)		Est.	Mid-Year Report		Year End Report	
All Counties: Provide training to HCCs and their members on MCM distribution plans. Documentation may be through HCC attendance at MCM ORR reviews or briefings provided by the LHD.	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Objective					
	Q3	Deb Diaz				
Activities		Activities				
1	PH will provide a training on the MCM Dispensing Plan, including closed PODs, to the Unified Command. (Note 9)	Q3	Deb Diaz			
2	PH will provide a training on the MCM Dispensing Plan, including closed PODs, to the Emergency Medical Care Committee. (Note 9)	Q3	Deb Diaz			
3	PH will provide a training on the MCM Dispensing Plan, including closed PODs, to the Mammoth Hospital Disaster Committee. (Note 9)	Q2	Deb Diaz			
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Required Deliverable		Deliverable(s)				
	1) Participation in MCM ORR reviews. or 2) Agenda & attendance rosters from LHD briefings.					
Notes:						

Mono County

**Capability 10: Medical Surge**

**Goal:**

Local Health Departments will update response plans to include medical surge incident in coordination with their HPP partners including updating public messaging templates, providing situational awareness, and supporting resource requests.

**Known Gaps:**

We have lost alternate MHOACs due to staff turnover. We are awaiting State Patient Movement Plan, Region VI Mutual Aid Agreement, revised EOM, and completion of local MHOAC Program Manual.

Mono County

<b>Objective 1</b> (Domain 5, Activity 2/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Test in an exercise or drill the Emergency Operations Plan and process for managing a medical surge event to include: - DOC and/or EOC organization (medical and health branch, position and responsibilities, etc.). - Process to collect and disseminate medical surge information. - Resource requesting procedures. - Sources to capture pertinent data (immediate bed availability system, etc.)  A real incident will meet this objective.  <i>Refer to HPP Cap 4 Medical Surge, PHEP Cap 3 Emergency Operations Coordination and PHEP Cap 6 Information Sharing.</i>	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q2	Richard Johnson				
<b>Activities</b>		<b>Activities</b>				
1	PH will lead a planning meeting for the Fall, 2017 Statewide Medical and Health Exercise, which will include all of the required elements. (Note 1)	Q1	Richard Johnson			
2	PH will lead a tabletop exercise as part of the Fall, 2017 Statewide Medical and Health Exercise, which will include all of the required elements. (Note 1)	Q2	Richard Johnson			
3	PH will lead a functional exercise for the Fall, 2017 Statewide Medical and Health Exercise, which will include all of the required elements. (Note 1)	Q2	Richard Johnson			
4						
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>					
	1) Inclusion of Medical Surge incident response needs in plans, policy and procedures. 2) Documentation demonstrating Medical Surge portion of Emergency Operations Plan was exercised or tested during a real incident.					

Mono County

**Notes:**

Mono County

<b>Objective 2</b> (Domain 5, Activity 2/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Review and update risk communication messages for medical surge incidents.  <i>Refer to HPP Cap 4 Medical Surge and PHEP Cap 4 Public Information and Warning.</i>	<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
	<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
Objective						
	Q1	Richard Johnson				
Activities						
1	Review existing risk communication messages/templates addressing medical surge needs in the DOP. (Note 2)	Q1	Richard Johnson			
2	Identify gaps. (Note 2)	Q1	Richard Johnson			
3	Revise/create message templates to address medical surge response needs in the public health DOP. (Note 2)	Q1	Richard Johnson			
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Deliverable(s)						
<b>Required Deliverable</b>	1) Updated public messaging templates that include information on Medical Surge.					
<b>Notes:</b>						

Mono County

<b>Objective 3</b> (Domain 5, Activity 2/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Review and update Emergency Operations Plan for activating temporary medical care sites (Government Authorized Alternate Care Sites and medical shelters) that includes: - Triggers for activation. - List of approved sites. - Resources needed to establish and operate.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q4	Deb Diaz				
<b>Activities</b>		Activities				
1	For public health messaging, see Objective 2.	Q1	Richard Johnson			
2	PH will review and update the GAACS Plan to ensure inclusion of triggers for activation. (Note 2)	Q1	Deb Diaz			
3	PH will maintain the list of sites that been assessed. (Note 2)	Q4	Deb Diaz			
4	PH will review the GAACS Plan to ensure inclusion of a list of resources needed to establish and operate. (Note 2)	Q1	Deb Diaz			
5						
6						
7						
8						
9						
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<b>Required Deliverable</b>		Deliverable(s)				
	1) Updated public messaging templates that include information on Medical Surge. 2) Updated Government Authorized Alternate Care Site plans and triggers for activation during Medical Surge. 3) List of approved sites and resources needed to establish and operate Government Authorized Alternate Care Site during Medical Surge.					
<b>Notes:</b>						

Mono County

<b>Objective 4</b> (Domain 5, Activity 2/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Test coordination during Medical Surge across continuum of care in a facilitated discussion between Public Health, MHOAC, and HCC.. A real incident will meet this objective.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q3	Richard Johnson				
<b>Activities</b>		<b>Activities</b>					
1	The Health Officer (who is also the MHOAC) will conduct a facilitated discussion on medical surge with the HCC. (Note 4)	Q3	Richard Johnson				
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10							
<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
1) Documentation of facilitated discussion on Medical Surge with HCC.							
<b>Notes:</b>							

Mono County

<b>Objective 5</b> (Domain 5, Activity 2/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
In coordination with the MHOAC and HCC, develop or review and test the process for demobilization of resources in an exercise or real incident.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
	Q2	Richard Johnson					
<b>Activities</b>		Activities					
1	The Mono County MHOAC Program Manual will be reviewed and updated to include a process for demobilization of resources. (Note 2)	Q1	Richard Johnson				
2	PH will lead a planning meeting with participating partners in the Fall, 2017 Statewide Medical and Health Exercise Program, which will include demobilization of medical and health resources after a medical surge event. (Note 1)	Q1	Richard Johnson				
3	PH will lead a tabletop with participating partners in the Fall, 2017 Statewide Medical and Health Exercise Program, which will include demobilization of medical and health resources after a medical surge event. (Note 1)	Q2	Richard Johnson				
4							
5							
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10							
<b>Required Deliverable</b>		Deliverable(s)					
	1) Documentation of demobilization of resources after a Medical Surge exercise or real incident.						
<b>Notes:</b>							

Mono County

**Capability 11: Non-Pharmaceutical Interventions**

**Goal:**

Local Health Departments will work with community partners to update Infectious Disease plans identifying all non-pharmaceutical interventions (NPIs), utilizing lessons learned from Ebola, updates include quarantine, isolation, fatality support services from behavioral/mental health.

**Known Gaps:**

A revised Infectious Disease Response Plan is almost completed, and will include lessons learned from H1N1, Ebola, and Zika.

Mono County

<b>Objective 1</b> (Domain 4, Activity 1/Function 1)		<b>Est.</b>	<b>Staff Lead</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Update and revise infectious disease response plan as needed to include authority and process to implement non-pharmaceutical interventions (NPIs) based on current emergent infectious diseases, utilize lessons learned during the introduction of the Ebola Virus into the US and recent Zika virus.		<b>Finish Date</b>	<b>(first and last name)</b>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
<i>Refer to your Pandemic influenza response plan and Ebola response plan.</i>		Q4	Ricchard Johnson				
<b>Activities</b>		<b>Activities</b>					
1	Continue to update/revise the Infectious Disease Response Plan. (Note 2)	Q1	Ricchard Johnson				
2	Review the legal authority of the Health Officer, especially the new legal chapter in the revised EOM, and incorporate into the local plan. (Note 2)	Q1	Ricchard Johnson				
3	Continue to include lessons learned from the Ebola response. (Note 2)	Q1	Ricchard Johnson				
4	Continue to include lessons currently being learned in the Zika response. (Note 2)	Q1	Ricchard Johnson				
5	Continue to develop templates for public messaging regarding NPI's. (Note 2)	Q2	Ricchard Johnson				
6	Continue to update links to contact information for media, community partners, and Healthcare Coalition members. (Note 2)	Q4	Deb Diaz				
7							
8							
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Updated infectious disease plan(s) includes legal and regulatory authorities and policies for recommending and implementing non-pharmaceutical interventions.						
<b>Notes:</b>							

Mono County

<b>Objective 2</b> (Domain 4, Activity 1/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Coordinate with subject matter experts, HCC, response partners and community to determine needed non-pharmaceutical interventions based on top three hazards for your jurisdiction.  <i>Refer to your Pandemic influenza response plan and Ebola response plan.</i>	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q3	Richard Johnson				
<b>Activities</b>		<b>Activities</b>				
1	Continue to discuss and evaluate potential NPI's with subject matter experts, Healthcare Coalition members, response partners, and community partners for the top three hazards - earthquake, and infectious disease outbreak, and evacuees/refugees from an urban CBRNE incident. (Note 4)	Q3	Richard Johnson			
2	Continue to prioritize possible NPI's based on likely scenarios involving the three top hazards. (Note 4)	Q3	Richard Johnson			
3	Continue to incorporate message templates for these NPI's and each hazard into the Infectious Disease Response Plan or the PH DOP. (Note 2)	Q3	Richard Johnson			
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>					
	1) Documentation of NPIs discussion in meeting minutes. 2) List of NPIs and where to locate.					
<b>Notes:</b>						

Mono County

<b>Objective 3</b> (Domain 4, Activity 1/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop or update Infectious Disease plan to include mental and behavioral health considerations during isolation, quarantine and fatalities during an infectious disease incident, include telehealth strategies with consideration of family members.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q1	Richard Johnson				
<b>Activities</b>		Activities				
1	Continue to review the Infectious Disease Response Plan regarding mental and behavioral health considerations, especially for isolation and quarantine. (Note 2)	Q1	Richard Johnson			
2	Identify gaps in the existing plan. (Note 2)	Q1	Richard Johnson			
3	Address the gaps in a revised Infectious Disease Response Plan and in the PH DOP. (Note 2)	Q1	Richard Johnson			
4	Include alternate strategies for family communication where they do not exist into each of the plans. (Note 2)	Q1	Richard Johnson			
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<b>Required Deliverable</b>		Deliverable(s)				
	1) Updated NPI, isolation and quarantine, operating procedures to include mental and behavioral health. 2) List of alternative family visitation e.g. live video calling.					
<b>Notes:</b>						

Mono County

<b>Objective 4</b> (Domain 4, Activity 1/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop/maintain and update a process or procedure for monitoring persons exposed to agents of public health concern, including emergent infectious diseases and implementing recommendations (e.g., from CDC, CDPH) for the exposed individuals.  <i>Refer to your Pandemic influenza response plan and Ebola response plan.</i>	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q1	Richard Johnson				
<b>Activities</b>						
	Activities					
1	Review and enhance in the Infectious Disease Response Plan a process for monitoring exposed persons. (Note 2)	Q1	Richard Johnson			
2	Update the plan to enhance procedures for escalating, de-escalating, and adaption to current requirements. (Note 2)	Q1	Richard Johnson			
3	Include feedback and lessons being learned from the 2009-10 H1N1, Ebola, and Zika response. (Note 2)	Q1	Richard Johnson			
4	Enhance SOP for support of persons under isolation and quarantine orders. (Note 2)	Q1	Richard Johnson			
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<b>Required Deliverable</b>				<b>Deliverable(s)</b>		
	1) Incorporate feedback from community and response partners on NPIs into AAR/IP after a real event or exercise. 2) Plan or standard operating procedure to support quarantine and isolation of patients.					
<b>Notes:</b>						

Mono County

**Capability 12: Public Health Laboratory Testing**

**Goal:**

Local public health laboratories will sustain laboratory and personnel regulatory requirements and certification. Will develop working relationships with local health departments without laboratories and commercial laboratories to provide essential testing. Maintain jurisdictional laboratory information management system (LIMS); sustain capability to report test results via CalREDIE or electronically to cap (for jurisdictions not using CalREDIE)

**Known Gaps:**

We do not redundancy in training in order to handle specimens.

Mono County

Objective 1 (Domain 6, Activity 3/Function 1) <b>Public Health Lab</b> Annually review and update the plan/procedure for contacting sentinel laboratories within the jurisdiction/catchment area in the event of a public health inside. (This plan/procedure may be included in the Laboratory Continuity Plan - rather than a standalone plan).	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective						
	Q4	Richard Johnson				
Activities						
1	N/A					
2	6/9/17: Mono County has one sentinel clinical (hospital) laboratory, and maintains the ability to contact them via redundant communication channels on a 24/7/365 basis, which is documented in our Infectious Disease Response Plan (Note 8)	Q1 Richard Johnson				
3	6/9/17: Mono County Health Department can demonstrate real event activity and communication between the Health Department, the CD Controller, and/or the Health Officer, on almost a daily basis throughout the year for routine activities, which include face-to-face, electronic means (CalREDIE), FAX, e-mail, etc., such as Zika testing, bloodborne post exposure testing, STI's, all reportable diseases, etc. (Note 4)	Q2 Richard Johnson				
4	6/9/17: Mono County Health Department can provide said contact information when requested to the CDPH, and can transmit any messages from CDPH to the Mammoth Hospital Laboratory instantaneously as required. (Note 8)	Q4 Richard Johnson				
5	6/9/17: Mono County is served by the San Joaquin Public Health Laboratory, and maintains 24/7 contact information with them. Mono County also maintains the ability to contact CDPH and its laboratories through the Duty Officer Program on a 24/7/365 basis. (Note 8)	Q4 Richard Johnson				
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<b>Required Deliverable</b>			Deliverable(s)			
1) Maintain and submit to CDPH, current contact information for and other information requested about laboratory networks including LRN-B laboratories, public health laboratories, and sentinel clinical laboratories within the jurisdiction/catchment area for inclusion in A STATWIDE DATABASE ACCORDING TO CDPH guidance, when available. 2) Submit laboratory information and data about PHL to CDPH within established deadlines for reporting to the CDC.						

Mono County

Notes:

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Mono County

Objective 2 (Domain 6, Activity 3/Function 1)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
Public Health Lab Develop or update the laboratory specific continuity plan that integrates into the overall LHD continuity of government continuity (COG) plan.				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
<b>Activities</b>		Activities					
1	N/A						
2							
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<b>Required Deliverable</b>		Deliverable(s)					
1) Provide Lab Continuity plan to CDPH.							
<b>Notes:</b>							

Mono County

Objective 3 (Domain 6, Activity 3/Function 1)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>Public Health Lab</b> Implement corrective actions for at least one gap identified in FY15/16. Establish working relationship with other laboratories to develop informal and formal agreements to conduct essential testing should the PHL become unable to function. If no formal/written agreements exist (e.g., MOU), explain why this is not feasible. The plan should contain contact information with other labs to notify other laboratories to assume testing should the Local PHL be non-functional.	Objective					
Activities						
1	N/A					
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Deliverable(s)						
Required Deliverable	1) Provide documentation of Corrective Actions for one gap identified in FY15/16. 2) Status report on Continuity plan developed or updated during FY16/17.					
Notes:						

Mono County

Objective 4 (Domain 6, Activity 3/Function 1) <b>Public Health Lab</b> If no Continuity plan exists continue to develop the plan based on the plan/timeline created in FY15/16.		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
<b>Activities</b>		Activities					
1	N/A						
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<b>Required Deliverable</b>		Deliverable(s)					
1) Public health lab continuity plan.							
<b>Notes:</b>							

Mono County

Objective 5 (Domain 6, Activity 3/Function 2)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report		
All Counties:				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)	
Maintain shipping and packaging certification of designated personnel. Document training on a shipping and packaging that meets national and state requirements, including forensic chain of custody procedures.		Objective						
		Q1	Richard Johnson					
Activities		Activities						
1	The Health Officer will maintain current his certificate in the training for the responsibilities of shippers/cargo agents for transport of Dangerous Goods, Category A and B Infectious Substances, including forensic chain of custody procedures. (Note 9)	Q1	Richard Johnson					
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Required Deliverable		Deliverable(s)						
1) Update staff roster for those certified and those that received training during the grant year 2016/17								
Notes:								

Mono County

Objective 6 (Domain 6, Activity 3/Function 2)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
All Counties: Conduct and document laboratory staff training on biosafety and biosecurity practices/procedures pertaining to sample management and safety.				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Objective							
Activities				Activities			
1	N/A - only for counties with a PHL according to Q and A document from 16/17 - We assume it is the same this year.						
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Required Deliverable				Deliverable(s)			
1) Document laboratory staff training on biosafety and biosecurity for samples.							
Notes:							

Mono County

Objective 7 (Domain 6, Activity 3/Function 2)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>All Counties:</b> Develop/maintain protocols/procedures stating that all specimens for testing are submitted through the LRN reference laboratory, not to other entities unless so directed by the LRN reference laboratory.		Objective					
		Q1	Richard Johnson				
<b>Activities</b> 1 Public Health will review the Infectious Disease Response Plan to verify/modify/add protocol/procedures stating that all specimens are submitted through the LRN reference laboratory, unless directed otherwise by the laboratory. (Note 2) 2 3 4 5 6 7 8 9 10		Activities					
		Q1	Richard Johnson				
<b>Required Deliverable</b>		Deliverable(s)					
1) Submit protocols/procedures that demonstrate all specimens for testing are submitted through the LRN reference laboratory.							
<b>Notes:</b>							

Mono County

Objective 8 (Domain 6, Activity 3/Function 2)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>All Counties:</b> Maintain/review and annually update written plans, procedures, protocols for sample collection, triage, packaging, shipping, transport, handling, storage, and disposal, including 24/7 contact information and submission criteria.		Objective					
		Q1	Richard Johnson				
<b>Activities</b> 1 The Health Officer will continue to enhance written plan/procedure/protocols for sample collection, triage, packaging, shipping, transport, handling, storage, disposal, and prioritization, including 24/7 contact information and submission criteria. (Note 2) 2 3 4 5 6 7 8 9 10		Activities					
		Q1	Richard Johnson				
<b>Required Deliverable</b> 1) Submit plans/procedures/protocols for sample collection, triage, packing, shipping, transport, handling, storage, and disposal, including 24/7 contact information and submission criteria.		Deliverable(s)					
<b>Notes:</b>							

Mono County

Objective 9 (Domain 6, Activity 3/Function 2)		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
Counties with a LRN-B Lab: Maintain appropriate regulatory requirements and valid US Dept. of Agriculture/Animal and Plant Health Inspection Service/Veterinary Services Shipping Permit.				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
				Objective			
Activities							
1	N/A						
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3							
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				Deliverable(s)			
Required Deliverable	1) Provide proof of compliance with appropriate regulations.						
Notes:							

Mono County

Objective 10 (Domain 6, Activity 3/Function 3) Counties with an LRN-B Sentinel and Reference PL: Document training, competencies, and proficiency testing for appropriate LRN-B testing methods.		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
				Objective			
<b>Activities</b>				Activities			
1	N/A						
2							
3							
4							
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<b>Required Deliverable</b>				Deliverable(s)			
1) Documentation of LRN-B proficiency testing.							
<b>Notes:</b>							

Mono County

Objective 11 (Domain 6, Activity 3/Function 3)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report		
Public Health Lab				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)	
Maintain/Update the plan to sustain capability to perform laboratory testing for routine and surge capacity, including personnel resources, laboratory and staff training and competencies, and equipment/technology resources. (This may be incorporated into the Laboratory Continuity plan, and not as a standalone plan).		Objective						
Activities		Activities						
1	N/A							
2								
3								
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Required Deliverable		Deliverable(s)						
1) Surge plan contains all elements in the objective at a minimum.								
Notes:								

Mono County

Objective 12 (Domain 6, Activity 3/Function 3)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>Public Health Lab</b> Develop/maintain/update annually written plans to optimize and/or argument personnel for short-term (e.g., days) and long-term (e.g., weeks to months) laboratory testing/surge response efforts. (This may be incorporated into the Laboratory Continuity plan, and not as a standalone plan.)		Objective					
Activities		Activities					
1	N/A						
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3							
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Required Deliverable		Deliverable(s)					
1) Submit plan to optimize and/or augment personnel for short-term and long-term laboratory testing/surge response efforts to CDPH.							
Notes:							

Mono County

Objective 13 (Domain, Activity 3/Function 3)		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
Public Health Lab Maintain a written plan/protocol for and execution of preventative maintenance contracts, service agreements, and other inspections/certification for laboratory equipment and instruments.				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Objective							
Activities							
1	N/A						
2							
3							
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Deliverable(s)							
Required Deliverable	1) Submit preventative maintenance plan to CDPH.						
Notes:							

Mono County

Objective 14 (Domain 6, Activity 3/Function 4)	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>Public Health Lab</b> Develop/maintain/update annually protocols to share data and coordinate activities with applicable partner agencies and groups (e.g., first responders, epidemiologists, poison control centers, law enforcement.)	Objective					
<b>Activities</b>						
1	N/A					
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<b>Required Deliverable</b>						
1) Test ability to share data and coordinate activities during real incident or exercise.						
<b>Notes:</b>						

Mono County

Objective 15 (Domain 6, Activity 3/Function 5)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>Public Health Lab</b> Build/maintain a jurisdictional Laboratory Information Management System (LIMS) with the ability to automatically send 17CCR2505 reportable California Reportable Disease Information Exchange (CalREDIE) ELR-compliant HL7 v 2.5.1 message data to CDPH, the CalREDIE, Electronic Laboratory Reporting (ELR), and the CDC (as applicable). The PHL will collaborate with CDPH/CalREDIE ELR to configure LIMS and ancillary information systems to enable SOAP transmission of electronic laboratory reporting to CDPH.		Objective					
Activities		Activities					
1	N/A						
2							
3							
4							
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Required Deliverable		Deliverable(s)					
1) Public health lab jurisdictional Laboratory Information Management System (LIMS) that meets the objective's criteria.							
Notes:							

Mono County

Objective 16 (Domain 6, Activity 3/Function 5)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
Public Health Lab				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Continue to develop or update written processes for reporting laboratory results in compliance with security, data exchange, and notification requirements/guidelines.							
		Objective					
		Activities					
1	N/A						
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		Deliverable(s)					
Required Deliverable	1) Submit written process for reporting laboratory results to CDPH.						
Notes:							

Mono County

**Capability 13: Public Health Surveillance and Epidemiological Investigation**

**Goal:**

Sustain and enhance public health surveillance and epidemiological investigation capacity; to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological processes; and to increase surge detection systems and epidemiological processes in response to incidents of public health significance.

**Known Gaps:**

We have little surge capacity, and are lacking in access to some sources of data.

Mono County

Objective 1 (Domain 6, Activity 1/Function 1)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report		
All Counties:				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)	
Develop, maintain, or enhance local epidemiological processes of gathering and analyzing data from multiple and diverse sources, including: - Reportable condition surveillance - Syndromic surveillance systems (e.g., BioSense) - Surveillance of major causes of mortality (use of Vital Statistics) - Surveillance of major causes of morbidity - Novel and/or emerging public health threats		Objective						
		Q4	Richard Johnson					
Activities		Activities						
1	Public Health will maintain the local process of gathering and analyzing data regarding school absenteeism. (Note 3)	Q4	Richard Johnson					
2	Public Health will maintain the local process of gathering and analyzing data regarding EMS transports for influenza-like illness (ILI) and other syndromes. (Note 3)	Q4	Richard Johnson					
3	Public Health will maintain the local process of gathering and analyzing data regarding Emergency Department (ED) discharge diagnoses. (Note 3)	Q4	Richard Johnson					
4	Public Health will maintain the local process of gathering and analyzing data regarding admission diagnoses to Mammoth Hospital. (Note 3)	Q4	Richard Johnson					
5	Public Health will maintain the local process of gathering and analyzing ILI data from Sierra Park Family Medicine and Pediatrics in the CDC Sentinel Provider Program and report said data electronically to the CDC. (Note 3)	Q4	Richard Johnson					
6	Public Health will seek to develop the ability to gather and analyze data from Death Certificates. (Note 4)	Q4	Richard Johnson					
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Required Deliverable		Deliverable(s)						
	1) Written plans include processes and protocols for gathering and analyzing data.							

Mono County

**Notes:**

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Mono County

Objective 2 (Domain 6, Activity 1/Function 2)		Est.	Mid-Year Report		Year End Report		
All Counties:	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)	
			Objective				
Continue developing epidemiological processes to gather and analyze data from other sources such as: - Environmental conditions - Hospital discharge statistics - Information from mental/behavioral health agencies - Population based surveys - Disease registries - Immunization registries - Active case findings		Q4	Richard Johnsob				
Activities		Activities					
1	Public Health will continue to seek to develop the ability to gather and analyze data from Mental/Behavioral Health. (Note 4)	Q4	Richard Johnsob				
2	Public Health will document processes to gather, analyze, and operationalize data from environmental health. (Note 2)	Q1	Richard Johnsob				
3	Public Health will document processes to gather, analyze, and operationalize data from hospital discharge statistics. (Note 2)	Q1	Richard Johnsob				
4	Public Health will document processes to gather, analyze, and operationalize data from CAIR - our Immunization Registry. (Note 2)	Q1	Richard Johnsob				
5	Public Health will document processes to gather, analyze, and operationalize data from population based surveys that exist. (Note 2)	Q3	Richard Johnsob				
6	Public Health will document processes to gather, analyze, and operationalize data from CalREDIE. (Note 2)	Q1	Richard Johnsob				
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Required Deliverable	Deliverable(s)						
	1) Written plans include processes and protocols to gather, analyze, and operationalize the data from the listed data sources to enhance public health preparedness.						

Mono County

**Notes:**

Mono County

Objective 3 (Domain 6, Activity 1/Function 3)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<p><b>All Counties:</b> Maintain and ensure 24/7 local health department access to collect, review, and respond to reports of potential health threats.</p> <p><i>If no, please provide any barriers or challenges, and how the LHD will address the issue.</i></p>		Objective					
		Q4	Deb Diaz				
Activities		Activities					
1	PH will maintain as current its 24/7 contact and call-down list for key personnel via redundant communication modes, and provide it to Mono County Sheriff's Dispatch, with revisions as necessary. This includes the Health Officer, the Health Director, primary and alternate MHOAC's, and the Emergency Preparedness Coordinator. (Note 3)	Q4	Deb Diaz				
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Required Deliverable		Deliverable(s)					
	1) Written plans include procedures to ensure 24/7 health department access (e.g., designated phone line, contact person).						
Notes:							

Mono County

Objective 4 (Domain 6, Activity 1/Function 4)		Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
				Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>All Counties:</b> The LHD agrees to transmit all California State Reportable Diseases and Conditions data electronically to CDPH either through full use of CalREDIE or in the format specified by CDPH.  If no, please provide any barriers or challenges, and how the LHD will address the issue.		Objective					
		Q4	Richard Johnson				
Activities		Activities					
1	The CD Controller will maintain competency in CalREDIE processes and procedures, and we agree to electronically transmit all California State Reportable Diseases and Conditions, and use any other format specified by CDPH. (Note 2 and 9)	Q4	Richard Johnson				
2	Written plans will include a requirement to conform with CalREDIE proedures and processes. (Note 2)	Q1	Richard Johnson				
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Required Deliverable		Deliverable(s)					
1) Written plans include procedures and processes for reporting diseases and conditions by using CalREDIE or other reporting format specified by CDPH.							
Notes:							

Mono County

Objective 5 (Domain 6, Activity 1/Function 1)		Est.	Mid-Year Report		Year End Report	
All Counties: Maintain public health staff to conduct data collection, analysis, surveillance, and epidemiological investigations, who are competent and trained at a minimum, in Tier 1 competencies and Skills for Applied Epidemiologists	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Objective					
	Q4	Deb Diaz				
Activities						
1	PH will maintain a list of staff trained at a Tier 1 level, including documentation of all trainings attended. (Note 9)	Q4	Deb Diaz			
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Deliverable(s)						
Required Deliverable	1) Written plans and policies include a list of all public health staff's level of competency and if applicable, all trainings attended that ensure the level of competency is being maintained.					
Notes:						

Mono County

Objective 6 (Domain 6, Activity 1/Function2)		Est.	Mid-Year Report		Year End Report	
All Counties:		Finish	Staff Lead	Status	Primary Barrier	Primary Barrier
Maintain staffing capacity to manage the routine epidemiological investigations in the jurisdiction. (This includes contracting for epidemiological services.)		Date	(first and last name)	(Describe in Notes)	(Describe in Notes)	(Describe in Notes)
		Objective				
		Q4	Deb Diaz			
Activities		Activities				
1	PH will maintain list of staff trained in routine epi investigations, including all trainings attended. (Note 2)	Q4	Deb Diaz			
2	PH will maintain a current list of potentially available resources to call on when assistance is needed. (Note 2)	Q1	Richard Johnson			
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Required Deliverable		Deliverable(s)				
1) Written plans and policies include competency level of public health epidemiological staff and how the competency is maintained (e.g., securing assistance from academic institutions or state-level staff).						
Notes:						

Mono County

Objective 7 (Domain 6, Activity 1/Function 2)		Est.	Mid-Year Report		Year End Report	
All Counties: Maintain current and update operational plans, policies, and procedures for the tracking and monitoring travelers and/or others during an highly pathogenic infectious disease outbreak or event (e.g., Ebola)	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Objective					
	Q1	Richard Johnsob				
Activities						
1	PH will ensure that the Infectious Disease Response Plan includes current and up-to-date plans, policies, and procedures fore tracking and monitoring persons during an infectious disease outbreak or event as required. (Note 2)	Q1	Richard Johnsob			
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Deliverable(s)						
Required Deliverable	1) Written plans, policies, and procedure for the tracking and monitoring of travelers and/or others during a highly pathogenic infectious disease outbreak or event are maintained and reviewed/updated annually. 2) Optional deliverable: drill or exercise these plans, policies, and procedures.					
Notes:						

Mono County

Objective 8 (Domain 6, Activity 1/Function 1 & 2)		Est.	Mid-Year Report		Year End Report		
		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
<b>All Counties:</b> Maintain or develop plans to increase and train staff to manage surge/emergency epidemiological investigations in the jurisdiction.		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	The Health Officer will utilize monthly staff meetings and PHN meetings to continue to develop skills for clinical and non-clinical staff to support epi investigations in response to any incident/threat. (Note 9)	Q4	Richard Johnson				
2	PH will provide documentation of any other trainings received or provided (e.g., on-line, teleconference, in person, etc.) (Note 9)	Q4	Deb Diaz				
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<b>Required Deliverable</b>		Deliverable(s)					
	1) Written plans and processes include mechanisms for continual development of skills for both epi and non-epi staff (e.g., just-in-time training) to support surge epidemiological investigations in response to natural or intentional threats or incidents (e.g., CBRNE threats).						
<b>Notes:</b>							

Mono County

Objective 9 (Domain 6, Activity 1/ Function 2)		Est.	Mid-Year Report		Year End Report		
Counties with Epidemiologic Services:		Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
Continue to develop/maintain written plans to optimize and/or augment personnel for short-term (e.g., days) and long-term (e.g., weeks to months) epidemiologic investigations/surge response efforts.		Objective					
		Q3	Richard Johnson				
Activities		Activities					
1	The Health Officer as the MHOAC, will utilize policies and procedures in the Mono County MHOAC Program Manual for situation reporting and resource requesting for epi resources needed either/both short and/or long-term. (Note 3)	Q1	Richard Johnson				
2	The Health Officer will continue to work with Region VI partners on the development and approval of a Region VI Medical and Health Mutual Aid Plan, which would include epi resources. (Note 2 and 8)	Q2	Richard Johnson				
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Required Deliverable	Deliverable(s)						
	1) Written plans and processes include surge strategies to conduct long-term epidemiological investigation response efforts.						
Notes:							

Mono County

Objective 10 (Domain 6, Activity 1/Function 3)		Est.	Mid-Year Report		Year End Report	
All Counties: Review and update written plans for recommending and initiating, if indicated, containment and mitigation actions for significant public health incidents.	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Objective					
	Q3	Richard Johnson				
Activities						
1	Public Health will update the Infectious Disease Response Plan with lessons learned from Ebola and Zika response. (Note 2)	Q1	Richard Johnson			
2	Public Health will ensure that potentially recommended and initiated containment and mitigation actions for the top three hazards and other infectious diseases are included in the plan. (Note 2)	Q1	Richard Johnson			
3	Public Health will provide training on the plan, and especially implementation of containment and mitigation strategies, to all PH staff. (Note 9)	Q3	Richard Johnson			
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Required Deliverable			Deliverable(s)			
1) Written plans include protocols for containment and mitigation actions for public health incidents (e.g., novel virus).						
Notes:						

Mono County

Objective 11 (Domain 6, Activity 1/Function 3)		Est.	Mid-Year Report		Year End Report	
All Counties: Develop or maintain procedures for monitoring mitigation actions and document outcomes, using tools such as data reports or statistical summaries	Finish Date	Staff Lead (first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Objective					
	Q1	Richard Johnson				
Activities						
1	PH will develop procedures for monitoring mitigation actions, and will determine what tools to use to document outcomes. These procedures will be included in the Infectious Disease Response Plan. (Note 2)	Q1	Richard Johnson			
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Deliverable(s)						
Required Deliverable	1) Written plans include procedures for monitoring actual performance, and document actions and outcomes using tools such as data reports (e.g., MMWR summaries).					
Notes:						

Mono County

Objective 12 (Domain 6, Activity 1/Function 3)		Est.	Mid-Year Report		Year End Report	
All Counties: Maintain a quality improvement process to review unusual outbreak investigations and update plans/procedures as needed.	Finish	Staff Lead	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
	Date	(first and last name)				
Objective						
	Q1	Richard Johnson				
Activities		Activities				
1	PH DOP will include written policies procedures for reviewing all infectious disease events outside of day-to-day operations, including brief or full HSEEP compliant AAR/IP, according to the nature of the event. (Note 2)	Q1	Richard Johnson			
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Required Deliverable	Deliverable(s)					
	1) Written policy and procedures include conducting and developing after action reports and improvement plans that are shared with local public health and key stakeholders.					
Notes:						

Mono County

<b>Objective 13</b> (Domain 6, Activity 1/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
<b>All Counties:</b>		<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
Participate in statewide teleconference calls for current emerging public health issues for planning and jurisdictional response activities (e.g., Zika).		<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
		Objective					
		Q4	Richard Johnson				
<b>Activities</b>		<b>Activities</b>					
1	The Health Officer, and other designated staff as appropriate for the call and event, will maintain documentation of participation in statewide teleconference calls as they occur. (Note 4)	Q4	Richard Johnson				
2	The Health Officer or another designated staff person will be responsible for disseminating information and educating other PH staff to provide situational awareness. (note 4)	Q4	Richard Johnson				
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<b>Required Deliverable</b>		<b>Deliverable(s)</b>					
	1) Written plans and processes for public health staff to be informed and prepared for current emerging public health issues (e.g., Zika).						
<b>Notes:</b>							

Mono County

**Capability 14: Responder Safety and Health**

**Goal:**

Local Health Departments are to protect public health agency staff responding to an incident and the ability to support health and safety needs of hospital and medical facility personnel, if requested.

**Known Gaps:**

We have training gaps in EMS, PH, EH, social services, and behavioral health due to staff turnover.

Mono County

<b>Objective 1</b> (Domain 4, Activity 4/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Include environmental and behavioral health components from the jurisdiction risk assessment in responder health and safety.	<b>Finish</b>	<b>Staff Lead</b>	<b>Status</b>	<b>Primary Barrier</b>	<b>Status</b>	<b>Primary Barrier</b>
	<b>Date</b>	<i>(first and last name)</i>		<i>(Describe in Notes)</i>		<i>(Describe in Notes)</i>
Objective						
	Q1	Richard Johnson				
<b>Activities</b>						
	Activities					
1	PH will review and enhance as necessary the Mono County Exposure Control Plan to include the top three hazards and EH and BH components of responder safety and health. (Note 2 and 8)	Q1	Richard Johnson			
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Deliverable(s)						
<b>Required Deliverable</b>	1) Personnel protective equipment (PPE) plan that provides for the health and safety of PH staff and responders for the top three identified jurisdictional hazards.					
<b>Notes:</b>						

Mono County

<b>Objective 2</b> (Domain 5, Activity 4/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop, maintain and/or sustain current level of public health personnel protective equipment (PPE) cache and update PPE plans and inventory list to include manufacturer/dispenser information.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q1	Deb Diaz				
<b>Activities</b>		<b>Activities</b>				
1	PH will maintain its current level of PPE for public health personnel. (Note 3)	Q1	Deb Diaz			
2	PH will add a vendor list with manufacturer/dispenser information to the Exposure Control Plan. (Note 2)	Q1	Deb Diaz			
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>					
	1) PPE plan that includes sustainment and vendor list.					
<b>Notes:</b>						

Mono County

<b>Objective 3</b> (Domain 5, Activity 4/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop a process for tracking medical and behavioral health impact on public health responders during an emergency.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q1	Richard Johnson				
<b>Activities</b>		Activities				
1	PH will enhance the Exposure Control Plan by incorporating policies and procedures from the Emergency Responder Monitoring and Surveillance Program (ERHMS) Tool , which includes both medical and BH impacts on first responders. (Note 2)	Q1	Richard Johnson			
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<b>Required Deliverable</b>	Deliverable(s)					
	1) Response plan includes surveillance of medical and behavioral health impact on first responders during emergencies.					
<b>Notes:</b>						

Mono County

**Capability 15: Volunteer Management**

**Goal:**

Local Health Departments will develop a process or MOU with local resources/organizations to provide support during incidents.

**Known Gaps:**

We have few licensed healthcare workers living in our jurisdiction who are not already employed. We do not have the ability access the registration on healthcare workers who are visiting from other areas.

Mono County

<b>Objective 1</b> (Domain 5, Activity 3/Function 1)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Continue to recruit, update and register medical and health volunteers into the DHV System.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		<b>Activities</b>					
1	PH will continue to recruit and register medical and health volunteers into the DHV system, and document all outreach efforts. (Note 3) 6/9/17: Outreach will include meetings such as Unified Command, Emergency Medical Care Committee, Mammoth Hospital Disaster Committee, and CERT. DHV material will also be disseminated through leadership in such organizations as Mono County EMS Department, Mammoth Hospital, Sierra Park Clinics, Toiyabe Indian Health Project, and Pioneer Home Health/Hospice.	Q1	Deb Diaz				
2	PH will maintain a current contact list of DHV volunteers. (Note 3)	Q4	Deb Diaz				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
1) Updated DHV medical and health volunteers contact list.							
<b>Notes:</b>							

Mono County

<b>Objective 2</b> (Domain 5, Activity 3/Function 2)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Test process used to notify and coordinate internal and external "volunteers" within the jurisdiction and determine their availability to respond during an incident; may use DHV system.  <i>Refer to Cap 6 Information Sharing.</i>	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q3	Deb Diaz				
<b>Activities</b>		<b>Activities</b>				
1	PH will conduct a notification drill of volunteer availability to respond during an incident using the DHV system. (Note 1)	Q3	Deb Diaz			
2	6/9/17: Mono County Health Department, specifically the DHV Coordinator, will conduct the drill, with support of other public health staff only. It is anticipated that volunteers who are registered into the DHV system will have been notified of an up-coming drill in advance, most likely by letter or e-mail. We do not anticipate any other meetings or discussion about the process leading up to the drill other than perhaps with the Health Officer, MHOAC, and/or Public Health Director. (Note 1)	Q3	Deb Diaz			
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>					
1) Documentation of "volunteer" notification in an exercise or real event.						
<b>Notes:</b>						

Mono County

<b>Objective 3</b> (Domain 5, Activity 3/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Document a process to address logistical needs of volunteer personnel during an incident (e.g. food, and lodging).		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
		Objective					
		Q3	Deb Diaz				
<b>Activities</b>		<b>Activities</b>					
1	Ph will develop a plan to meet the logistical needs of volunteer personnel during an incident. (Note 2)	Q3	Deb Diaz				
2	6/9/17: Public Health will review the Public Health Department Operations Plan (DOP) to ensure inclusion of measures and ICS compatible structure in order to address the logistical needs of volunteers called in support of medical and/or health issues in an event. (Note 2)	Q1	Richard Johnson				
3	6/9/17: Public Health, through an enhanced DOP, will address any identified gaps in the DOP regarding a process for meeting the logistical needs of volunteers. (Note 2)	Q1	Richard Johnson				
4	6/9/17: Public Health will provide training to public health staff that would be assigned to the Logistics Section in a Public Health Department Operations Center (DOC) as to their roles and responsibilities in providing for the logistical needs of volunteers in support of public health operations. (Note 9)	Q3	Deb Diaz				
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Documentation of a plan, process or checklist for meeting the logistical needs of volunteers.						
<b>Notes:</b>							

Mono County

<b>Objective 4</b> (Domain 5, Activity 3/Function 3)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>		
Develop a process for managing spontaneous volunteers.		<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
Objective							
	Q4	Deb Diaz					
<b>Activities</b>		Activities					
1	PH will work with partners to develop a plan for the management of spontaneous volunteers. (Note 2)	Q1	Deb Diaz				
2	6/9/17: Public Health will work with other HCC partners and stakeholders, especially Mammoth Hospital, Mono County EMS Department, and Mono County OES, to outline a process for managing spontaneous volunteers. (Note 2)	Q1	Deb Diaz				
3	6/9/17: Based on discussion and input from partners above, Public Health will create a draft document outlining roles and responsibilities of each partner in managing spontaneous volunteers. (Note 2)	Q2	Deb Diaz				
4	6/9/17: Public Health will seek to develop consensus and approval for the plan to manage spontaneous volunteers. (Note 8)	Q3	Deb Diaz				
5	6/9/17: Public Health will provide training to its staff on the role of the department in managing spontaneous volunteers. (Note 9)	Q4	Deb Diaz				
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<b>Required Deliverable</b>	1) Documentation of a process to manage spontaneous volunteers.			Deliverable(s)			
<b>Notes:</b>							

Mono County

<b>Objective 5</b> (Domain 5, Activity 3/Function 4)		<b>Est.</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
Develop a process for the demobilization of public health personnel and volunteers, including DHV.	<b>Finish Date</b>	<b>Staff Lead</b> <i>(first and last name)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>	<b>Status</b>	<b>Primary Barrier</b> <i>(Describe in Notes)</i>
	Objective					
	Q3	Deb Diaz				
<b>Activities</b>		<b>Activities</b>				
1	PH will develop a process for demobilization of PH personnel and volunteers. (Note 2)	Q3	Deb Diaz			
2	6/9/17: Public Health will research best practices and lessons learned from other sources as to the process and what is necessary, since we have not done any work in this area thus far. (Note 2)	Q1	Deb Diaz			
3	6/9/17: Based on above research, Public Health will create a draft process for demobilization of PH personnel and volunteers, and will include all necessary elements as determined from said research. (Note 2)	Q2	Deb Diaz			
4	6/9/17: Public Health will provide training to its staff on the process for demobilization of staff and volunteers, and modify the process based on input from staff. (Notes 8 and 9)	Q3	Deb Diaz			
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<b>Required Deliverable</b>	<b>Deliverable(s)</b>					
1) Demobilization plan, process or checklist for volunteers.						
<b>Notes:</b>						

**General Notes**

•	All Objective Activities and Deliverables should be S.M.A.R.T (Specific, Measurable, Assignable, Realistic, and Time-related).	
•	<b>Small, Medium, Large Counties</b> (CHEAC)	<b>Small County:</b> Population < 200,000
		<b>Medium County:</b> Population 200,000 - 699,999
		<b>Large County:</b> Population 700,000 or more

**Specific Notes**

#	Subject	Note
1	<b>Evaluate in drill, exercise, or real event</b> This includes:	HSEEP compliant exercise AAR/IP List of Participants Copy of exercise materials
2	<b>Developing a plan activities</b> examples	Meet with stakeholders Research Draft Share draft with stakeholders Revise to include stakeholder input Approval of plan
3	<b>Sustainment activities</b> examples	Meet with stakeholders Training Test, drill, exercise Updating procedures, processes, checklists, Job Action Sheets, contact lists etc. Review/Revise plan(s)
4	<b>Documentation of meetings</b> This includes:	Date and agenda Key outcomes and action items List of all invites (distinguish between actuals and no-shows)
5	<b>Access to Care</b>	Access to care includes physical access to public health or healthcare services during a disaster. (e.g., transportation, accessible medical care sites such as medical shelters or field treatment sites, PODs, etc.).
6	<b>Top prioritized hazard(s):</b>	The top hazard(s), as prioritized by the county. This does not require that you use the top hazards from the 2012 Public Health Risk Assessment.
7	<b>Capability 1</b> Eleven community sectors	Business Community leadership

		Cultural and faith-based groups and organizations
		Emergency management
		Healthcare
		Social services
		Housing and sheltering
		Media
		Mental/behavioral health;
		Department of Aging or equivalent
		Education and childcare settings
8	<b>Completed plans, procedures, protocols, etc....</b>	Completed plans, policies, and protocols includes approved according to local policy. Working drafts may be considered completed if they are reviewed and updated as needed every two years.
9	<b>Documentation of training</b> This includes:	Training materials List of participants
10	<b>At-Risk Populations</b>	As defined at the local level, i.e. what populations are at-risk within your operational area. Additional resource: <a href="http://www.phe.gov/Preparedness/clearinghouse/casualty/Documents/atrisk.pdf">http://www.phe.gov/Preparedness/clearinghouse/casualty/Documents/atrisk.pdf</a>

<p>11</p>	<p><b>Required Planning Elements</b> Exercise must include at least 3</p>	<ol style="list-style-type: none"> <li>1. Triggers for activation of the plan</li> <li>2. Decompression of hospitals, preload diversion to other delivery sites including government authorized alternate care sites and triage protocols and routing of patients</li> <li>3. Evacuation/shelter in place plans and Operational Area support of facility plans</li> <li>4. Process for engaging behavioral/mental health</li> <li>5. Patient movement, distribution, and tracking</li> <li>6. Volunteer management</li> <li>7. Policies and procedures for information sharing and resource requesting for healthcare coalition members consistent with standard EOM requirements.</li> </ol>
<p>12</p>	<p><b>Pediatric or Neo-Natal Surge Tool Kits or useful information</b>  Information provided by Pat Frost, Director of Emergency Medical Services, Contra Costa Health Services</p>	<ol style="list-style-type: none"> <li>1. Contra Costa County Neonatal and Pediatric Disaster Toolkit (as an example to show how this can be done)</li> <li>2. Children's LA Disaster Pediatric Emergency Decision Support System (PEDSS) Logistics Tool for the actual surge calculators and tools to do the projections <a href="http://www.chladisastercenter.org/site/c.ntJYJ6MLIsE/b.3569369/k.BB83/PEDSS.htm">http://www.chladisastercenter.org/site/c.ntJYJ6MLIsE/b.3569369/k.BB83/PEDSS.htm</a> the actual tool is at <a href="http://pedss.isi.edu/pedss/">http://pedss.isi.edu/pedss/</a>.</li> <li>3. Kidsdata.org for the easy accessible data to get started <a href="http://kidsdata.org/">http://kidsdata.org/</a></li> <li>4. <a href="https://sites.google.com/site/pedineonetwork/">https://sites.google.com/site/pedineonetwork/</a></li> <li>5. OSHPD Hospital Bed capacity information (which always has to be validated locally to understand the real capability of the hospitals)</li> <li>6. Bed capacity analysis done in 2011 by the Coalition which needs to have some corrections and updating prior to making available, but this is what helped us figure this out.</li> <li>7. Marianne Gausche data from her pediatric readiness study would also help <a href="http://www.pediatricreadiness.org/">http://www.pediatricreadiness.org/</a></li> <li>8. EMSA has a Regional Trauma Care Commission Data form that has useful information including pediatrics information but again would need to get the most recent version from the EMS Authority.</li> </ol>

# PHEP Base Budget FY17-18

**FY 17/18 PHEP Base Budget**

Date: 5/18/2017

<b>Entity Name: Mono County</b>	
<b>Allocation:</b>	<b>\$107,374</b>
<b>Indirect Cost based on:</b>	<b>Personnel</b>
<b>Personnel Costs Rate</b>	<b>25.0%</b>
<b>Direct Costs Rate</b>	

*See Indirect Cost Rate tab*

Budget Category	BUDGET	
	Total	% Allocation
Personnel	\$48,093.07	45%
Fringe	\$37,554.00	35%
Operating Expenses	\$0.00	0%
Equipment	\$0.00	0%
In State Travel	\$0.00	0%
Out of State Travel	\$0.00	0%
Subcontracts	\$0.00	0%
Other Costs	\$315.16	0%
<b>Total Direct</b>	<b>\$85,962.23</b>	<b>80%</b>
<b>Indirect Cost (\$)</b>	<b>\$21,411.77</b>	
<b>Total Expenditures</b>	<b>\$107,374.00</b>	
<b>Payment Balance</b>	<b>\$0.00</b>	
<b>Balance</b>	<b>\$0.00</b>	

# PHEP Base Budget FY 17-18

2017 - 2018 PROJECT BUDGET		CDC PHEP Base Funds			Capability	Obj.	Budget Justification
Personnel							
UID	Position Title and Name of personnel in that position	FTE	Salary	Cost			
PP101	Public Health Officer - Richard Johnson, M.D.	7%	\$ 165,911	\$11,614	Program Management	All	The Health Officer facilitates, develops, and directs all PHEP activities. Dr. Johnson is employed as a part-time Health Officer. Additional hours are funded by the grants, and subject to the availability of funds. Continuous time studies are used to track time in the different programs and grants. Fractional positions exist solely to support program operations. No other funding exists to support program activities related to this budget.
PP102	Public Health Emergency Preparedness Manager - Debra Diaz	25%	\$ 64,674	\$16,169	Program Management	All	The Emergency Preparedness Coordinator oversees all education and training and assists the Health Officer in managing all grant activities, focusing on access and functional needs program, CAHAN, and DHV.
PP103	Fiscal and Technical Specialist IV - Nancy Cruz-Garcia	40%	\$ 50,777	\$20,311	Program Management	All	This individual provides support for the Emergency Preparedness Manager across all capabilities. She performs yearly inventory checks, and keeps contact lists and supplies up-to-date, including the ERD, the MHOAC Resource Directory. She performs essential logistical support for all planned meetings, trainings, and exercises. Fractional positions exist solely to support program operations. No other funding exists to support program activities related to this budget.
PP104			\$ -	\$0			
PP105			\$ -	\$0			
PP106			\$ -	\$0			
PP107			\$ -	\$0			
PP108			\$ -	\$0			
PP109			\$ -	\$0			
PP110			\$ -	\$0			
PP111			\$ -	\$0			
PP112			\$ -	\$0			
PP113			\$ -	\$0			
PP114			\$ -	\$0			
PP115			\$ -	\$0			
PP116			\$ -	\$0			
PP117			\$ -	\$0			
PP118			\$ -	\$0			
PP119			\$ -	\$0			
PP120			\$ -	\$0			
PP121			\$ -	\$0			
PP122			\$ -	\$0			
PP123			\$ -	\$0			
PP124			\$ -	\$0			
PP125			\$ -	\$0			
				<b>\$48,093</b>			
<b>Fringe Benefits</b>		%					
		78.09%					
<b>Subtotal Personnel and Fringe</b>							
			<b>\$37,554</b>				
			<b>\$85,647</b>				

# PHEP Base Budget FY 17-18

UID	<b>Operating Expenses</b>	<b>Cost</b>	<b>Capability</b>	<b>Obj.</b>	<b>Budget Justification</b>
POE101		\$0			
POE102		\$0			
POE103		\$0			
POE104		\$0			
POE105		\$0			
POE106		\$0			
POE107		\$0			
POE108		\$0			
POE109		\$0			
POE110		\$0			
POE111		\$0			
POE112		\$0			
POE113		\$0			
POE114		\$0			
POE115		\$0			
POE116		\$0			
POE117		\$0			
POE118		\$0			
POE119		\$0			
POE120		\$0			
<b>Operating Expenses Subtotal</b>		<b>\$0</b>			

# PHEP Base Budget FY 17-18

UID	Equipment (Minor/Major)	Quantity	Unit Price	Total	Capability	Obj.	Budget Justification
PE101				\$0			
PE102				\$0			
PE103				\$0			
PE104				\$0			
PE105				\$0			
PE106				\$0			
PE107				\$0			
PE108				\$0			
PE109				\$0			
PE110				\$0			
PE111				\$0			
PE112				\$0			
PE113				\$0			
PE114				\$0			
PE115				\$0			
PE116				\$0			
<b>Equipment Subtotal</b>				<b>\$0</b>			

# PHEP Base Budget FY 17-18

	In State Travel/Per Diem		Total	Capability	Obj.	Budget Justification
UID						
PT101			\$0			
PT102			\$0			
PT103			\$0			
PT104			\$0			
	<b>In State Travel/Per Diem Subtotal</b>		<b>\$0</b>			
UID	Out of State Travel/Per Diem		Total	Capability	Obj.	Budget Justification
PT105			\$0			
PT106			\$0			
PT107			\$0			
	<b>Out of State Travel/Per Diem Subtotal</b>		<b>\$0</b>			

# PHEP Base Budget FY 17-18

UID	Subcontracts	Total	Capability	Obj.	Budget Justification
PC101		\$0			
PC102		\$0			
PC103		\$0			
PC104		\$0			
PC105		\$0			
PC106		\$0			
PC107		\$0			
PC108		\$0			
PC109		\$0			
PC110		\$0			
PC111		\$0			
<b>Subcontract Subtotal</b>		<b>\$0</b>			

# PHEP Base Budget FY 17-18

UID	Other Costs	Total	Capability	Obj.	Budget Justification
	<b>Software and Licenses</b>	<b>\$0</b>			
PO101		\$0			
PO102		\$0			
PO103		\$0			
PO104		\$0			
PO105		\$0			
PO106		\$0			
	<b>Training</b>	<b>\$315</b>			
PO107	SWMHE - Tabletop and Functional Exercise	\$315	Medical Surge	1	Lunch and lunch supplies for the tabletop and functional exercise participants.
PO108		\$0			
PO109		\$0			
PO110		\$0			
PO111		\$0			
PO112		\$0			
PO113		\$0			
PO114		\$0			
	<b>Exercise Materials</b>	<b>\$0</b>			
PO115		\$0			
PO116		\$0			
PO117		\$0			
PO118		\$0			
PO119		\$0			
	<b>Maintenance Agreements</b>	<b>\$0</b>			
PO120		\$0			
PO121		\$0			
PO122		\$0			
PO123		\$0			
PO124		\$0			
<b>Other Costs Subtotal</b>		<b>\$315</b>			
<b>Total Direct Costs</b>		<b>\$85,962</b>			
<b>Total Indirect Costs</b>		<b>\$21,412</b>			
<b>Total Costs</b>		<b>\$107,374</b>			

Local Entity	Indirect Cost Rate	
	Personnel Cost	Direct Cost
Alameda		11.18%
Alpine		15.00%
Amador	25.00%	
Berkeley (City of)		14.43%
Butte	25.00%	
Calaveras	25.00%	
Colusa	25.00%	
Contra Costa	11.10%	
Del Norte	25.00%	
El Dorado	25.00%	
Fresno	25.00%	
Glenn	24.71%	
Humboldt	25.00%	
Imperial	25.00%	
Inyo	25.00%	
Kern	25.00%	
Kings	25.00%	
Lake	25.00%	
Lassen	25.00%	
Long Beach (City of)	20.47%	
Los Angeles	19.91%	
Madera	25.00%	
Marin	25.00%	
Mariposa	10.00%	
Mendocino	25.00%	
Merced	25.00%	
Modoc	22.79%	
Mono	25.00%	
Monterey	25.00%	
Napa	25.00%	
Nevada	25.00%	
Orange	19.85%	
Pasadena (City of)	19.45%	
Placer	25.00%	
Plumas	25.00%	
Riverside	25.00%	
Sacramento	14.48%	
San Benito	25.00%	
San Bernardino	15.62%	
San Diego	25.00%	
San Francisco	25.00%	
San Joaquin	25.00%	
San Luis Obispo	20.08%	
San Mateo	20.35%	
Santa Barbara	23.52%	
Santa Clara	25.00%	
Santa Cruz	20.04%	

Shasta	25.00%	
Sierra	25.00%	
Siskiyou	11.05%	
Solano		15.00%
Sonoma	23.39%	
Stanislaus	25.00%	
Sutter	25.00%	
Tehama	25.00%	
Trinity	25.00%	
Tulare	15.31%	
Tuolumne	25.00%	
Ventura	14.31%	
Yolo	25.00%	
Yuba	25.00%	



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

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# *Mono County*

# Local Pan Flu Work Plan

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FY 17-18

3/24/2017

v1

State General Fund Pandemic Influenza Planning Program (Pan Flu)

EMERGENCY PREPAREDNESS OFFICE

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**BE PREPARED CALIFORNIA**

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Mono County

**Pan Flu**

**Goal:**

Strengthen operational area planning and response for an pandemic influenza.

**Known Gaps:**

Our Pan Flu Plan has been incorporated into our Infectious Disease Response Plan, and is nearing completion. It will include lessons learned from exercises, H1N1, Ebola, and Zika response.

Baseline Deliverables	Mid-Year Report		Year End Report	
	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
1) Data submitted to CDPH related to to severe (hospitalized in an intensive care unit [ICU]) and fatal cases of influenza for lab-confirmed cases for person under the age of 65.				
2) Report all laboratory-confirmed influenza cases according to severity categories specified by CDPH				
3) Written policies and procedures are in place for quarantine and/or isolation including the use of law enforcement for noncompliance.				
4) List of activities to support healthcare facility infection control efforts based on lessons learned from recent outbreaks and current events.				
5) List of engagement activities with the local HPP Entity to promote access to healthcare for at-risk populations during an emergency.				
6) <b>Optional for Mass Vaccination Clinic Exercises:</b> Conduct a exercise and do an AAR/IP Exercise should include: identification of the high risk and priority target groups, receipt of the vaccine, with the focus on low income populations, collaboration between public health emergency preparedness personnel and immunization program personnel to plan and conduct the exercise				

**Notes:**

Mono County

Objective 1		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report		
All Counties:				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	
Maintain a surveillance system for reporting severe (hospitalized in an ICU) and fatal cases of laboratory-confirmed influenza under 65 years of age via electronic means or fax during both the regular influenza season and in a pandemic.		Objective						
		Q4	Richard Johnson					
Activities		Activities						
1	Maintain current full CalREDIE capability, with documentation of having a trained CalREDIE Administrator (Note 3)	Q4	Richard Johnson					
2	Continue to renew the Health Officer order from Nov., 2009 at the beginning of each seasonal influenza season. (Notes 3 and 7)	Q2	Richard Johnson					
3								
4								
5								
6								
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8								
9								
10								
Required Deliverable	Deliverable(s)							
	1) Influenza surveillance records.							
Notes:	The Health Officer order, which was issued in November, 2009, is still in effect. This mandates our only general acute care hospital to report all hospitalizations of laboratory confirmed influenza cases regardless of age. A reminder of this requirement is sent to all health care providers in the jurisdiction at the beginning of each annual flu season. This would be extended to apply to any pandemic which might occur outside of the usual seasonal influenza season.							

Mono County

Objective 2		Est.	Staff Lead	Mid-Year Report		Year End Report		
All Counties:		Finish Date	(first and last name)	Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)	
Maintain the ability to identify and report (via electronic means or fax) ALL laboratory-confirmed influenza cases according to severity categories that will be specified by CDPH (e.g., hospitalized ICU/severe, outpatient or fatal) during an imminent or declared pandemic.		Objective						
		Q4	Richard Johnson					
Activities		Activities						
1	The current full capability and well functioning system will be maintained. See Objective 1, Activities 1 and 2 (Notes 3 and 7)	Q4	Richard Johnson					
2	The Health Officer is a Sentinel Provider in the CDC Influenza-like Illness Program, screening approx. 400-500 outpatient visits per week during the seasonal influenza season. OUTPUT: documentation of weekly reports to CDC (Note 3)	Q4	Richard Johnson					
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4								
5								
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8								
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Required Deliverable	Deliverable(s)							
	1) Procedure and template for reporting influenza cases by severity.							
Notes:	Mammoth Hospital electronically reports to the Health Department on a weekly basis all positive influenza, RSV, and pertussis laboratory reports, including status (ED, clinic, inpatient, ICU, death). This normally occurs throughout the annual seasonal influenza season, but in a pandemic, would be extended throughout any potential affected time period. In addition, the Health Officer is a Sentinel Provider in the CDC ILINet, U.S. Outpatient Influenza-like Illness Surveillance Network, and electronically screens approx. 400 outpatient records from a Family Medicine and a Pediatrics Clinic each week for the entire seasonal influenza season.							

Mono County

Objective 3	Est.	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
	Finish Date		Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
<b>Counties with a PHL:</b> A. Maintain the ability of the public health laboratory to type and subtype influenza A viruses and lineage type influenza B viruses (if the laboratory is capable of lineage type testing) for any cases tested for influenza by status of clinical severity (e.g., hospitalized ICU/severe cases, outpatients, and/or fata cases) during both the regular influenza season and in a pandemic and report results to CDPH through established reporting mechanisms.  B. Submit influenza positive specimens to the CDPH Viral and Rickettsial Diseases Laboratory (VRDL) for antiviral resistance testing. The goal for the number of specimens to be submitted to VRDL are provided by the CDPH Immunization Branch to each public health laboratory in accordance with the Association of Public Health Laboratories Influenza Virologic Surveillance Right Size Roadmap that can be found at <a href="http://www.aphl.org/aboutAPHL/publications/Documents/ID_July2013_Influenza-Virologic-Surveillance-Right-Size-Roadmap.pdf">www.aphl.org/aboutAPHL/publications/Documents/ID_July2013_Influenza-Virologic-Surveillance-Right-Size-Roadmap.pdf</a>	Objective					
<b>Activities</b>	Activities					
1	N/A					
2						
3						
4						
5						
6						
7						
8						
9						
10						
<b>Required Deliverable</b>	Deliverable(s)					
	1) Procedure and template for lab reporting influenza cases by severity.					
<b>Notes:</b>						

Mono County

Objective 4	Est. Finish Date	Staff Lead (first and last name)	Mid-Year Report		Year End Report	
			Status	Primary Barrier (Describe in Notes)	Status	Primary Barrier (Describe in Notes)
<b>All Counties:</b> Maintain the ability to conduct active or passive monitoring for influenza-like illness among persons exposed to avian or novel influenza viruses (e.g., persons exposed to poultry infected with avian influenza on farms inside or outside of CA, persons exposed to humans with novel influenza virus infections such as H7N9 or H5N1). Report monitoring activities and results to CDPH electronically or via fax. Test symptomatic persons being monitored for influenza that were exposed to avian or novel influenza viruses at a public health laboratory.						
Objective						
	Q4	Richard Johnson				
Activities						
1	The Health Officer will monitor various sources (e.g., CDPH CD Brief, CAHAN, CDC, Epi-X, ProMED) for potential cases or outbreaks of avian or novel influenza viruses inside or outside of California. OUTPUT: Infectious Disease Response Plan (Notes 2 and 7)	Q4	Richard Johnson			
2	The Health Officer will maintain current 24/7 redundant contact information in order to receive reports of persons possibly exposed. (Notes 2 and 7)	Q4	Richard Johnson			
3	The Health Officer will delegate staff to monitor (e.g., home visits, electronic - text, Skype, phone) potentially exposed individuals for signs and symptoms every 12-24 hours for the duration of the incubation period. (Notes 2 and 7)	Q4	Richard Johnson			
4	All activities and results will be reported to CDPH via CalREDIE according to CDPH protocol, or via fax. (Notes 2 and 7), see Objective 1 and 2.	Q4	Richard Johnson			
5	Testing will be performed according to CDPH guidance, and specimens sent to San Joaquin PH lab, CDPH VRDL, or CDC, as directed. (Notes 2 and 7)	Q4	Richard Johnson			
6	Participate with Region VI in quarterly RDMHS/MHOAC meetings in order to coordinate situation reporting, resource requesting, and transportation needs for persons with highly contagious emerging infectious disease.	Q4	Richard Johnson			
7						
8						
9						

Mono County

10					
<b>Required Deliverable</b>	Deliverable(s)				
	1) Procedure for monitoring exposed persons. 2) Template for reporting monitoring activities to CDPH.				
<b>Notes:</b>					

Mono County

Objective 5		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report		
All Counties:				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	
Maintain plans for disseminating CDPH/LHD guidelines for prioritization of influenza laboratory testing to public and private laboratories, healthcare facilities and providers, and other key healthcare partners within the jurisdiction during both the regular influenza season and in a pandemic.		Objective						
		Q4	Richard Johnson					
Activities		Activities						
1	The Health Officer receives all electronic correspondence from CDPH via e-mail or CAHAN alerts. This includes all guidelines for prioritizing laboratory testing. (Notes 2 and 7)	Q4	Richard Johnson					
2	The Health Officer modifies CDPH and CDC guidance for local application, and distributes to all health care facilities, providers, and partners through Mono-Grams. (Notes 2 and 7)	Q4	Richard Johnson					
3	The distribution lists for the Mono-Grams are kept current at all times, and updated frequently. (Note 3)	Q4	Richard Johnson					
4	The Infection Control Practitioner at Mammoth Hospital redistributes the Mono-Grams both electronically and by hand to all clinical departments and providers within our single acute care hospital, which includes laboratory, and primary and specialty care clinics. (Notes 2 and 7)	Q4	Richard Johnson					
5								
6								
7								
8								
9								
10								
Required Deliverable	Deliverable(s)							
	1) Guidelines for prioritizing lab testing.							
Notes:								

Mono County

Objective 6		Est.	Mid-Year Report		Year End Report		
All Counties:		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Support healthcare facility infection control efforts based on lessons learned from recent outbreaks and current events.		Objective					
		Q4	Richard Johnson				
Activities		Activities					
1	The Health Officer and the Infection Control Practitioner are members of the Mammoth Hospital Disaster Preparedness Committee, which also discusses infection control issues. (Note 4)	Q4	Richard Johnson				
2	The Health Officer is the Staff Epidemiologist for Mammoth Hospital, and is in frequent contact with the Infection Control Practitioner. (Note 4)	Q4	Richard Johnson				
3	Mammoth Hospital participates with us in all exercises, hotwashes, and AAR/IP's. We will continue to engage Mammoth Hospital in all of our exercises, hotwashes, and AAR/IP's so that lessons learned are incorporated into our plans, policies, and procedures as we move forward. (Note 1)	Q4	Richard Johnson				
4	The Health Officer will continue to enhance Infectious Disease Response Plan. (Note 2)	Q2	Richard Johnson				
5							
6							
7							
8							
9							
10							
Required Deliverable		Deliverable(s)					
1) Updated Infectious Disease plan.							
Notes:							

Mono County

<b>Objective 7</b>		<b>Est. Finish Date</b>	<b>Staff Lead (first and last name)</b>	<b>Mid-Year Report</b>		<b>Year End Report</b>	
<b>All Counties:</b>				<b>Status</b>	<b>Primary Barrier (Describe in Notes)</b>	<b>Status</b>	<b>Primary Barrier (Describe in Notes)</b>
Maintain local Disaster Healthcare Volunteers Program activities for registration, credentialing and deploying volunteers.		Objective					
		Q4	Deb Diaz				
<b>Activities</b>		Activities					
1	Maintain the local DHV system by participating in at least 3 quarterly conference calls, in at least 3 quarterly DHV system drills, and maintaining DHV software administration capability. (Note 3)	Q4	Deb Diaz				
2	Maintain contact with all registered DHV responders within the operational area at least semi-annually. (Note 3)	Q4	Deb Diaz				
3	Document discussion with essential members of the Healthcare Coalition at Mammoth Hospital Disaster Preparedness Committee, the Emergency Medical Care Committee, and Unified Command, of their potential volunteer medical personnel needs. (Note 4)	Q4	Deb Diaz				
4	Document outreach to the community and organizations in order to educate and recruit members into the DHV Program. (Note 4)	Q4	Deb Diaz				
5	6/9/17: The DHV Coordinator will conduct a call-out drill with a specific scenario based on one of our highest risk hazards that will involve credentialing and deployment of local registered DHVs.	Q4	Deb Diaz				
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7							
8							
9							
10							
<b>Required Deliverable</b>	<b>Deliverable(s)</b>						
	1) Document outreach efforts to targeted group of medical and health volunteers.						
<b>Notes:</b>							

Mono County

Mono County

Objective 8		Est.	Mid-Year Report		Year End Report		
All Counties:		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
In coordination with the local Hospital Preparedness Program (HPP) and building on activities from FY16/17, engage in preparedness activities to promote access to healthcare for at-risk populations during an emergency.							
		Q4	Deb Diaz				
Activities		Activities					
1	Document continued outreach to the public through various individuals and organizations, e.g., providers, govt, CBO, FBO, etc., to enroll persons into the access and functional needs database. (Notes 4, 5, and 9)	Q4	Deb Diaz				
2	Enroll interested persons into the database, including GIS information. (Notes 3, 4, 5, and 9)	Q4	Deb Diaz				
3	Annually contact all enrollees to update and maintain current information. (Notes 3, 4, 5, and 9)	Q3	Deb Diaz				
4	Annually participate with local OES on a drill of use of the database in a specific geographic area of the jurisdiction, complete with AAR/IP. (Note 1) 6/9/17: The drill will involve local EMS and the Base Station - Mammoth Hospital, in addition to OES, in order to order an evacuation, locate persons in the geographic area potentially needing assistance with transportation, triage by EMS, and medical direction from the Base Station regarding destination.	Q3	Deb Diaz				
5	One person will attend the annual CDPH EPO workshop in Sacramento in June, 2018 (Note 4)	Q4	Deb Diaz				
6							
7							
8							
9							
10							
Required Deliverable	Deliverable(s)						
	1) Document outreach efforts to community to reach at-risk populations.						

Mono County

**Notes:**

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Mono County

Objective 9		Est. Finish Date	Staff Lead <i>(first and last name)</i>	Mid-Year Report		Year End Report	
All Counties:				Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
Develop/maintain procedures for quarantine and/or isolation to include mental and behavioral health considerations during isolation, quarantine and fatalities during a pandemic and include telehealth strategies with consideration of family members. Refer to PHEP Cap 11 Non-Pharmaceutic Interventions.		Objective					
		Q1	Richard Johnson				
Activities		Activities					
1	Document the addition of procedures for isolation and/or quarantine including behavioral and mental health considerations during any pandemic influenza incident, including telehealth with consideration of family members, in the Infectious Disease Response Plan. (Notes 2 and 7)	Q1	Richard Johnson				
2	Document the addition of procedures for isolation and/or quarantine including fatalities during any pandemic influenza incident, including telehealth with consideration of family members in the Infectious Disease Response Plan. (Notes 2 and 7)	Q1	Richard Johnson				
3							
4							
5							
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7							
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10							
Required Deliverable	Deliverable(s)						
	1) Updated Infectious Disease plan for quarantine and isolation.						
Notes:							

Mono County

Objective 10	Est.	Staff Lead	Mid-Year Report		Year End Report	
	Finish Date		(first and last name)	Status	Primary Barrier <i>(Describe in Notes)</i>	Status
<b>Optional</b> Invest up to 25% of pandemic influenza funding for influenza vaccine and/or 5% for pneumococcal vaccine for mass vaccination exercises.	Objective					
Activities						
1	N/A					
2						
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7						
8						
9						
10						
Notes:						

Mono County

Objective 11 <i>Optional or Carried-Forward from FY16/17</i>		Est.	Mid-Year Report		Year End Report		
		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
<b>Activities</b>		Activities					
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
<b>Required Deliverable</b>		Deliverable(s)					
1)							
2)							
3)							
<b>Notes:</b>							

Mono County

Objective 12 <i>Optional or Carried-Forward from FY16/17</i>		Est.	Mid-Year Report		Year End Report		
		Finish Date	Staff Lead <i>(first and last name)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>	Status	Primary Barrier <i>(Describe in Notes)</i>
		Objective					
<b>Activities</b>		Activities					
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
<b>Required Deliverable</b>		Deliverable(s)					
1)							
2)							
3)							
<b>Notes:</b>							

# FY 17-18 Pan Flu Work Plan

## General Notes

•	All Objective Activities and Deliverables should be S.M.A.R.T (Specific, Measurable, Assignable, Realistic, and Time-related).	
•	<b>Small, Medium, Large Counties</b> (CHEAC)	<b>Small County:</b> Population < 200,000
		<b>Medium County:</b> Population 200,000 - 699,999
		<b>Large County:</b> Population 700,000 or more

## Specific Notes

#	Subject	Note
1	<b>Evaluate in drill, exercise, or real event</b> This includes:	HSEEP compliant exercise AAR/IP List of Participants Copy of exercise materials
2	<b>Developing a plan activities examples</b>	Meet with stakeholders Research Draft Share draft with stakeholders Revise to include stakeholder input Approval of plan
3	<b>Sustainment activities examples</b>	Meet with stakeholders Training Test, drill, exercise Updating procedures, processes, checklists, Job Action Sheets, contact lists etc. Review/Revise plan(s)
4	<b>Documentation of meetings</b> This includes:	Date and agenda Key outcomes and action items List of all invites (distinguish between actuals and no-shows)
5	<b>Access to Care</b>	Access to care includes physical access to public health or healthcare services during a disaster. (e.g., transportation, accessible medical care sites such as medical shelters or field treatment sites, PODs, etc.).

## FY 17-18 Pan Flu Work Plan

6	<b>Top prioritized hazard(s):</b>	The top hazard(s), as prioritized by the county. This does not require that you use the top hazards from the 2012 Public Health Risk Assessment.
7	<b>Completed plans, procedures, protocols, etc...</b>	Completed plans, policies, and protocols includes approved according to local policy. Working drafts may be considered completed if they are reviewed and updated as needed every two years.
8	<b>Documentation of training</b> This includes:	Training materials List of participants
9	<b>At-Risk Populations</b>	As defined at the local level, i.e. what populations are at-risk within your operational area. Additional resource: <a href="http://www.phe.gov/Preparedness/clearinghouse/casualty/Documents/atrisk.pdf">http://www.phe.gov/Preparedness/clearinghouse/casualty/Documents/atrisk.pdf</a>
10	<b>Required Planning Elements</b> Exercise must include at least 3	<ol style="list-style-type: none"> <li>1. Triggers for activation of the plan</li> <li>2. Decompression of hospitals, preload diversion to other delivery sites including government authorized alternate care sites and triage protocols and routing of patients</li> <li>3. Evacuation/shelter in place plans and Operational Area support of facility plans</li> <li>4. Process for engaging behavioral/mental health</li> <li>5. Patient movement, distribution, and tracking</li> <li>6. Volunteer management</li> <li>7. Policies and procedures for information sharing and resource requesting for healthcare coalition members consistent with standard EOM requirements.</li> </ol>

## FY 17-18 Pan Flu Work Plan

11	<p><b>Pediatric or Neo-Natal Surge Tool Kits or useful information</b></p> <p>Information provided by Pat Frost, Director of Emergency Medical Services, Contra Costa Health Services</p>	<ol style="list-style-type: none"> <li>1. Contra Costa County Neonatal and Pediatric Disaster Toolkit (as an example to show how this can be done)</li> <li>2. Children's LA Disaster Pediatric Emergency Decision Support System (PEDSS) Logistics Tool for the actual surge calculators and tools to do the projections <a href="http://www.chladisastercenter.org/site/c.ntJYJ6MLIsE/b.3569369/k.BB83/PEDSS.htm">http://www.chladisastercenter.org/site/c.ntJYJ6MLIsE/b.3569369/k.BB83/PEDSS.htm</a> the actual tool is at <a href="http://pedss.isi.edu/pedss/">http://pedss.isi.edu/pedss/</a>.</li> <li>3. Kidsdata.org for the easy accessible data to get started <a href="http://kidsdata.org/">http://kidsdata.org/</a></li> <li>4. <a href="https://sites.google.com/site/pedineonetwork/">https://sites.google.com/site/pedineonetwork/</a></li> <li>5. OSHPD Hospital Bed capacity information (which always has to be validated locally to understand the real capability of the hospitals)</li> <li>6. Bed capacity analysis done in 2011 by the Coalition which needs to have some corrections and updating prior to making available, but this is what helped us figure this out.</li> <li>7. Marianne Gausche data from her pediatric readiness study would also help <a href="http://www.pediatricreadiness.org/">http://www.pediatricreadiness.org/</a></li> <li>8. EMSA has a Regional Trauma Care Commission Data form that has useful information including pediatrics information but again would need to get the most recent version from the EMS Authority.</li> </ol>
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# Pan Flu Budget FY17-18

**FY 17/18 Pan Flu Budget**

Date: 5/12/2017

<b>Entity Name: Mono County</b>	
<b>Allocation:</b>	<b>\$60,447</b>
<b>Indirect Cost based on:</b>	<b>Personnel</b>
<b>Personnel Costs Rate</b>	<b>25.0%</b>
<b>Direct Costs Rate</b>	

*See Indirect Cost Rate tab*

Budget Category	BUDGET	
	Total	% Allocation
Personnel	\$24,464.05	40%
Fringe	\$16,537.00	27%
Operating Expenses	\$6,577.69	11%
Equipment	\$0.00	0%
In State Travel	\$2,618.00	4%
Out of State Travel	\$0.00	0%
Subcontracts	\$0.00	0%
Other Costs	\$0.00	0%
<b>Total Direct</b>	<b>\$50,196.74</b>	<b>83%</b>
<b>Indirect Cost (\$)</b>	<b>\$10,250.26</b>	
<b>Total Expenditures</b>	<b>\$60,447.00</b>	
<b>Payment Balance</b>	<b>\$0.00</b>	
<b>Balance</b>	<b>(\$0.00)</b>	

# Pan Flu Budget FY17-18

2017 - 2018 PROJECT BUDGET		State Pandemic Influenza Funds			Obj.	Budget Justidication
Personnel						
UID	Position Title and Name of personnel in that position	FTE	Salary	Cost		
	Public Health Officer - Richard Johnson, M.D.					The Health Officer facilitates, develops, and directs all Pan Flu activities. Dr. Johnson is employed as a part-time Health Officer. Additional hours are funded by the grants, and subject to the availability of funds. Continuous time studies are used to track time in the different programs and grants. Fractional positions exist solely to support program operations. No other funding exists to support program activities related to this budget.
FP101		5%	\$ 165,911	\$8,296	4	
FP102	Emergency Preparedness Manager - Debra Diaz	25%	\$ 64,674	\$16,169	7	The Emergency Preparedness Coordinator oversees all staff education and training, and assists the Health Officer in managing all grant activities, focusing on at-risk populations, CAHAN, and DHV.
FP103			\$ -	\$0		
FP104			\$ -	\$0		
FP105			\$ -	\$0		
FP106			\$ -	\$0		
FP107			\$ -	\$0		
FP108			\$ -	\$0		
FP109			\$ -	\$0		
FP110			\$ -	\$0		
FP111			\$ -	\$0		
FP112			\$ -	\$0		
FP113			\$ -	\$0		
FP114			\$ -	\$0		
FP115			\$ -	\$0		
FP116			\$ -	\$0		
FP117			\$ -	\$0		
FP118			\$ -	\$0		
FP119			\$ -	\$0		
FP120			\$ -	\$0		
FP121			\$ -	\$0		
FP122			\$ -	\$0		
FP123			\$ -	\$0		
FP124			\$ -	\$0		
FP125			\$ -	\$0		
				<b>\$24,464</b>		
<b>Fringe Benefits</b>		%				
		67.60%	<b>\$16,537</b>			
<b>Subtotal Personnel and Fringe</b>			<b>\$41,001</b>			

# Pan Flu Budget FY17-18

UID	Operating Expenses		Cost	Obj.	Budget Justification
FOE101	Communication Service		\$6,200	4	Monthly charges for satellite phone services for the Public Health Emergency Preparedness staff.
FOE102	Communications		\$378	4	Monthly cell phone allowance for Public Health Emergency Preparedness Staff.
FOE103			\$0		
FOE104			\$0		
FOE105			\$0		
FOE106			\$0		
FOE107			\$0		
FOE108			\$0		
FOE109			\$0		
FOE110			\$0		
FOE111			\$0		
FOE112			\$0		
FOE113			\$0		
FOE114			\$0		
FOE115			\$0		
FOE116			\$0		
FOE117			\$0		
FOE118			\$0		
FOE119			\$0		
FOE120			\$0		
<b>Operating Expenses Subtotal</b>			<b>\$6,578</b>		

# Pan Flu Budget FY17-18

UID	Equipment (Minor/Major)	Quantity	Unit Price	Total	Obj.	Budget Justification
FE101				\$0		
FE102				\$0		
FE103				\$0		
FE104				\$0		
FE105				\$0		
FE106				\$0		
FE107				\$0		
FE108				\$0		
FE109				\$0		
FE110				\$0		
FE111				\$0		
FE112				\$0		
FE113				\$0		
FE114				\$0		
FE115				\$0		
FE116				\$0		
<b>Equipment Subtotal</b>				<b>\$0</b>		

# Pan Flu Budget FY17-18

UID	In State Travel/Per Diem		Total	Obj.	Budget Justification
	Region VI RDMHS Meetings (Quarterly)				Per diem, mileage, and lodging expenses for 1-2 persons to attend the quarterly RDMHS meetings in Riverside, CA. These meetings are important for the exchange of information for procedures for situation reporting, resource requesting, and transportation of highly contagious persons with an emerging infectious disease.
FT101			\$1,918	4	
FT102	CDPH Annual Conference		\$700	8	One person will attend the annual workshop for training and information sharing. Expenses include per diem, mileage, and lodging.
FT103			\$0		
FT104			\$0		
<b>In State Travel/Per Diem Subtotal</b>			<b>\$2,618</b>		
UID	Out of State Travel/Per Diem		Total	Obj.	Budget Justification
FT105			\$0		
FT106			\$0		
FT107			\$0		
<b>Out of State Travel/Per Diem Subtotal</b>				<b>\$0</b>	

# Pan Flu Budget FY17-18

UID	<b>Subcontracts</b>	<b>Total</b>	<b>Obj.</b>	<b>Budget Justification</b>
FC101		\$0		
FC102		\$0		
FC103		\$0		
FC104		\$0		
FC105		\$0		
FC106		\$0		
FC107		\$0		
FC108		\$0		
FC109		\$0		
FC110		\$0		
FC111		\$0		
<b>Subcontract Subtotal</b>		<b>\$0</b>		

# Pan Flu Budget FY17-18

UID	Other Costs	Total	Obj.	Budget Justification
	<b>Software and Licenses</b>	<b>\$0</b>		
FO101		\$0		
FO102		\$0		
FO103		\$0		
FO104		\$0		
FO105		\$0		
FO106		\$0		
	<b>Training</b>	<b>\$0</b>		
FO107		\$0		
FO108		\$0		
FO109		\$0		
FO110		\$0		
FO111		\$0		
FO112		\$0		
FO113		\$0		
FO114		\$0		
	<b>Exercise Materials</b>	<b>\$0</b>		
FO115		\$0		
FO116		\$0		
FO117		\$0		
FO118		\$0		
FO119		\$0		
	<b>Maintenance Agreements</b>	<b>\$0</b>		
FO120		\$0		
FO121		\$0		
FO122		\$0		
FO123		\$0		
FO124		\$0		
<b>Other Costs Subtotal</b>		<b>\$0</b>		
<b>Total Direct Costs</b>		<b>\$50,197</b>		
<b>Total Indirect Costs</b>		<b>\$10,250</b>		
<b>Total Costs</b>		<b>\$60,447</b>		

Local Entity	Indirect Cost Rate	
	Personnel Cost	Direct Cost
Alameda		11.18%
Alpine		15.00%
Amador	25.00%	
Berkeley (City of)		14.43%
Butte	25.00%	
Calaveras	25.00%	
Colusa	25.00%	
Contra Costa	11.10%	
Del Norte	25.00%	
El Dorado	25.00%	
Fresno	25.00%	
Glenn	24.71%	
Humboldt	25.00%	
Imperial	25.00%	
Inyo	25.00%	
Kern	25.00%	
Kings	25.00%	
Lake	25.00%	
Lassen	25.00%	
Long Beach (City of)	20.47%	
Los Angeles	19.91%	
Madera	25.00%	
Marin	25.00%	
Mariposa	10.00%	
Mendocino	25.00%	
Merced	25.00%	
Modoc	22.79%	
Mono	25.00%	
Monterey	25.00%	
Napa	25.00%	
Nevada	25.00%	
Orange	19.85%	
Pasadena (City of)	19.45%	
Placer	25.00%	
Plumas	25.00%	
Riverside	25.00%	
Sacramento	14.48%	
San Benito	25.00%	
San Bernardino	15.62%	
San Diego	25.00%	
San Francisco	25.00%	
San Joaquin	25.00%	
San Luis Obispo	20.08%	
San Mateo	20.35%	
Santa Barbara	23.52%	
Santa Clara	25.00%	
Santa Cruz	20.04%	

Shasta	25.00%	
Sierra	25.00%	
Siskiyou	11.05%	
Solano		15.00%
Sonoma	23.39%	
Stanislaus	25.00%	
Sutter	25.00%	
Tehama	25.00%	
Trinity	25.00%	
Tulare	15.31%	
Tuolumne	25.00%	
Ventura	14.31%	
Yolo	25.00%	
Yuba	25.00%	

# FY 17-18 Personnel Summary

UID	NAME/TITLE	FTE %							Annual Salary <i>(does not include Fringe)</i>	
		PHEP	LABS	CRI	HPP	PAN FLU	Ebola	Zika		TOTAL
PS101	Richard Johnson, M.D. - Public Health Officer	7.00%			12.00%	5.00%			24.00%	\$165,911.00
PS102	Debra Diaz - Public Health Emergency Preparedness Manager	25.00%			50.00%	25.00%			100.00%	\$64,674.00
PS103	Nancy Cruz-Garcia - Fiscal and Technical Specialist IV	40.00%							40.00%	\$50,777.00
PS104									0.00%	
PS105									0.00%	
PS106									0.00%	
PS107									0.00%	
PS108									0.00%	
PS109									0.00%	
PS110									0.00%	
PS111									0.00%	
PS112									0.00%	
PS113									0.00%	
PS114									0.00%	
PS115									0.00%	
PS116									0.00%	
PS117									0.00%	
PS118									0.00%	
PS119									0.00%	
PS120									0.00%	
PS121									0.00%	
PS122									0.00%	
PS123									0.00%	
PS124									0.00%	
PS125									0.00%	
PS126									0.00%	
PS127									0.00%	
PS128									0.00%	
PS129									0.00%	
PS130									0.00%	
<b>Totals</b>		<b>72.00%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>62.00%</b>	<b>30.00%</b>	<b>0.00%</b>	<b>0.00%</b>		

<b>EPO Use Only</b>	<b>0.72</b>	<b>0.62</b>	<b>0.30</b>	<b>0.00</b>	<b>0.00</b>
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