

2016

# Jackson County Environmental Public Health



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Jackson County Environmental Public Health

**JACKSON COUNTY ENVIRONMENTAL PUBLIC HEALTH DIVISION  
ANNUAL REPORT  
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## INTRODUCTION

The mission of the Environmental Public Health Division (EPH) is to promote the health and safety of the community through education and enforcement of public health regulations pertaining to food, pool, and lodging facilities, public drinking water systems, and wood stoves and open burning.

EPH licenses and inspects food service facilities (restaurants, mobile units, and temporary restaurants), pools and spas, and tourist facilities (hotels/motels, recreational parks, and organizational camps) pursuant to Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), and contractual agreements with the Oregon Health Authority (OHA). In addition, EPH provides consultation and inspection services to child care centers, school food services, and other group use facilities, including county detention facilities.

Separate from the facility inspection services, public water systems are surveyed and monitored, through contract with OHA, to help ensure that safe drinking water standards are met. A contract with the Oregon Department of Environmental Quality funds the Wood Stove and Open Burning Program, which provides public education and enforces the county wood stove and open burning regulations in order to maintain compliance with federal particulate matter air pollution standards (*Note: The Wood Stove and Open Burning Program is not included in this report, as it is addressed in a separate report issued in spring.*)

EPH is also involved in various “community health hazards” (term used to describe miscellaneous public health concerns). Such hazards include recreational water quality and human or pet contact with suspect rabid animals.

## LICENSING AND INSPECTIONS

The Licensing and Inspection Program (LIP) is the informal term used to describe all programs in which licensure and/or inspections are required in order to ensure compliance with applicable health and safety regulations. The LIP program is funded 100% by license and inspection fees. The following programs are part of LIP:

- **Food Program:** The primary goal of the Food Program is to prevent foodborne illness. An intergovernmental agreement with the OHA delegates authority to EPH to perform all licensing and inspection services for restaurants, temporary restaurants, mobile units, commissaries, warehouses, and vending machines. Food Program activities are conducted pursuant to the following statutes and rules:

ORS Chapter 624 Food Service Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 150 Food Sanitation Rule; OAR 333 - Division 157 Inspection and Licensing Procedures; OAR 333 - Division 158 Combination Food Service Facilities; OAR 333 - Division 160 Destruction of Food Unfit for Human Consumption; OAR 333 - Division 162 Mobile Units; OAR 333 - Division 175 Food Handler Training; OAR 581 - Division 051 School Food and Nutrition Services.

- **Swimming Pools/Spas:** The purpose of the Swimming Pool/Spa Program is to prevent injuries and waterborne illness. EPH is delegated authority by OHA to conduct program activities for licensing and inspection of public pools/spas pursuant to the following statutes and rules:

ORS Chapter 448 Pool Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 60 Public Swimming Pools; OAR 333 - Division 62 Public Spa Pools.

- **Tourist Facilities:** The Tourist Facilities Program serves to prevent illness and injuries. EPH is delegated authority by OHA to conduct licensing and inspections of travelers’ accommodations (hotels/motels, hostels, bed and breakfasts), organizational camps, and recreation parks (RV parks, campgrounds). Program activities are conducted pursuant to the following statutes and rules:

ORS Chapter 446 Tourist Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 29 Travelers’ Accommodations Rules; OAR 333 - Division 30 Organizational Camp Rules; OAR 333 - Division 31 Construction, Operation, and Maintenance of Recreation Parks.

- **Group Use:** The goal of the Group Use Program is to prevent illness and injuries. This program is distinguished from other LIP programs in that the facilities are not licensed by EPH. Inspections are conducted by EPH at the request of the facility due to the organization’s licensing body requiring inspections by the “local health department” or a Registered Environmental Health Specialist. The primary facilities involved are school food service, child care facilities (day cares and group care homes), and detention facilities.

**LIP Targets**

In 2016, Jackson County EPH decided to formally take on two performance measure monitoring projects in LIP as part of the Performance and Quality (PQ) Committee requirements. Target data is monitored and reviewed during monthly staff meetings, and a quarterly report is presented to the PQ Committee during a monthly meeting. The targets and associated outcomes are represented in Table 1 below.

**Table 1: Annual LIP Target Data**

Target	Outcome
Achieve at least 95% of required inspections.	Achieved 86% of inspections. (Note: the underachievement was directly due to losing 2 trained FTE to career changes, and time for training new staff.)
Conduct all re-inspections of food service critical violations (violations that can directly contribute to food contamination or illness) within 14 days.	164 of 170 re-inspections conducted within 14 days. Some of the inspections that did not get closed out within the 14 days were due to inspectors not documenting the corrections properly. Solutions were discussed during monthly staff meeting.

## LIP Summary

There were approximately 2,400 inspections due in 2016, and staff completed 2,107 of these inspections to yield an 88% inspection rate (Figure 1 offers historic annual inspection data). There were 3.5 field FTE in the licensing and inspection programs, resulting in an average of 602 inspections conducted per field employee in 2016. This number is somewhat skewed, in the fact we were without 1 FTE for 2 months and without another 1 FTE for a month. Then hired 2 new employees in which the productivity again fell during the 2 to 3 month EHS training process (*Note: There are about 50 more inspections of travelers' accommodations due in even-numbered years, as they are inspected every two years, and the inspections are not distributed evenly among years.*)

Figure 1

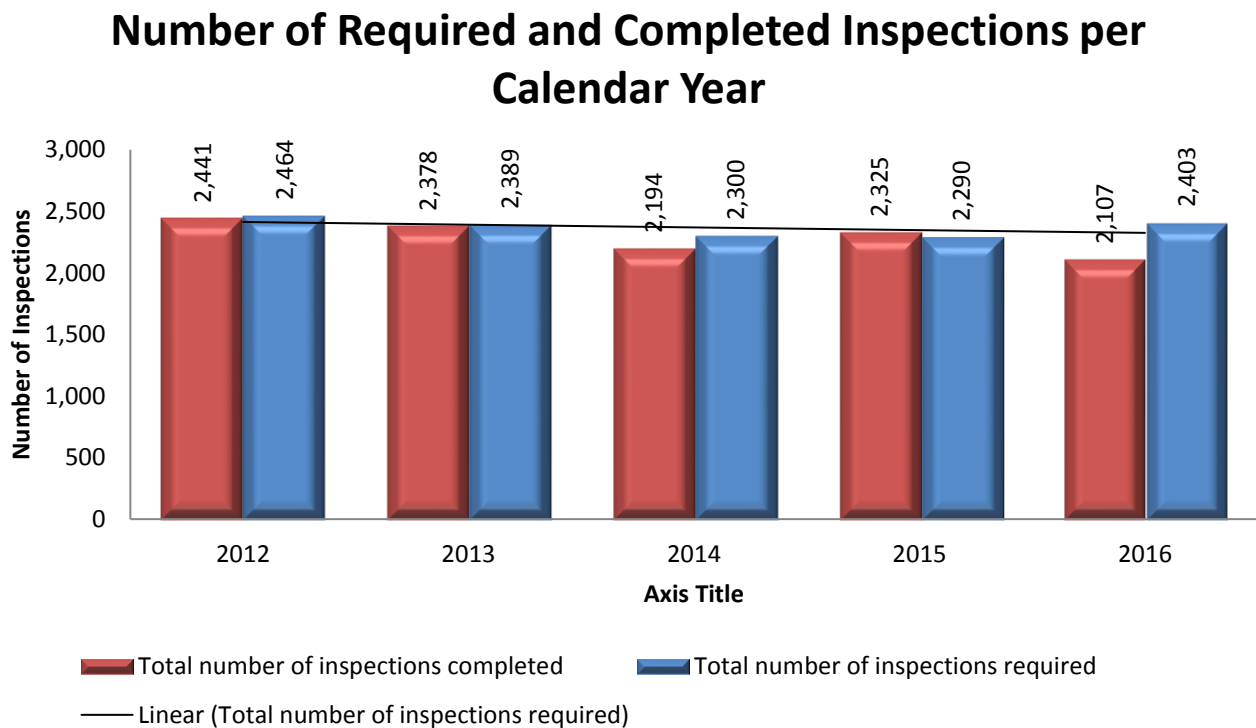
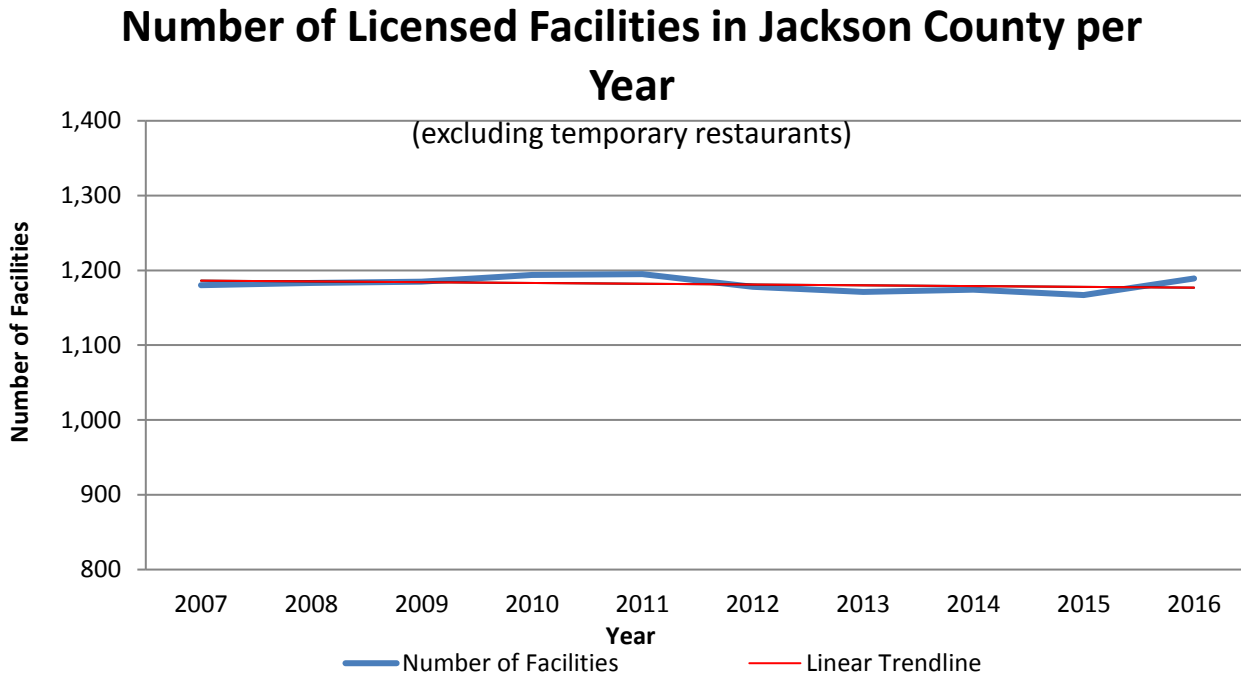


Figure 2



The number of licensed facilities (excluding temporary restaurants) has remained relatively flat over the past ten years at just less than 1,200 facilities (see Table 2 and Figure 2). A slight decline in facilities was realized in 2012 through 2014. But 2016 looked to bring a slight increase in the overall facility count, which is primarily attributed to the increased number of mobile food units. There has been a growing trend and popularity of mobile food vendors, and the creation of the food pod. Food pods are designated areas where several mobile food vendors gather and can offer their customers a wide variety of different foods in one location. Mobile units can be an appealing business enterprise due to their relatively low startup cost and overhead, in addition to the allure of self-employment.

The improving economy looks to be playing a role in the upswing of facility numbers as well. The department is beginning to see large corporate restaurant and hotel chains building new facilities in Jackson County again.

The number of temporary restaurants has steadily been decreasing since 2011. This decline is attributed to a change in temporary restaurant regulations that allows for 90-day seasonal and 30-day intermittent licenses for growers markets and other ongoing events, rather than issuing multiple single-event temporary licenses. But the main reason for the decrease is believed to be the use of licensed mobile food units at events rather than temporary food booths.

**Table 2: Historic Licensed Facility Numbers**

Facility Type	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Restaurants</b>	637	629	629	631	636	636	645	640	647	651
<b>Mobile Units</b>	94	84	92	96	104	100	91	101	94	106
<b>Commissaries</b>	8	11	13	15	11	13	11	10	10	13
<b>Warehouses</b>	17	13	13	12	12	11	11	12	10	12
<b>Vending</b>	3	2	2	1	1	1	1	1	1	1
<b>Pools/Spas</b>	212	214	211	212	205	200	201	206	204	207
<b>Tourist Accommodations</b>	135	142	138	138	135	132	127	125	123	123
<b>Bed and Breakfasts</b>	30	30	30	29	29	27	28	23	22	20
<b>Recreational Parks</b>	35	34	34	33	33	32	30	31	31	31
<b>Organizational Camps</b>	9	8	7	8	7	6	6	5	5	5
<b>Benevolent Restaurants</b>	nd	16	16	19	22	20	20	20	20	20
<b>Totals</b>	<b>1,180</b>	<b>1,183</b>	<b>1,185</b>	<b>1,194</b>	<b>1,195</b>	<b>1,178</b>	<b>1,171</b>	<b>1,174</b>	<b>1,167</b>	<b>1,189</b>
<b>Temporary Restaurants (non-benevolent)</b>	170	202	220	219	223	184	202	180	176	153
<b>Temporary Restaurants (benevolent)</b>	146	145	152	152	153	140	140	128	128	92
<b>Temp Restaurants Total</b>	316	347	372	371	376	324	342	308	304	245

In 2016, there were five restaurants that received a “Failed to Comply” inspection score (see Table 3 for historic data). Four restaurants voluntarily closed in 2016 due to imminent health hazards, but were re-opened when health hazards were corrected.

**Table 3: Historic Restaurant Failure to Comply and Closures**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Failure to Comply</b>	6	1	2	2	4	0	3	2	1	5
<b>Closures</b>	0	0	0	1	1	4	0	2	1	4

In 2016 there were 138 total facility complaints received (Table 4). Most complaints involve unsanitary conditions (real and perceived). Such general complaints of unsanitary conditions are investigated and resolved.

**Table 4: Historic Licensed Facility Complaint Data (vast majority are food service facility complaints)**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Facility Complaints</b>	183	189	134	148	141	138	140	161	141	138

In respect to public pools and spas, of the 264 inspections conducted in 2016, seventeen resulted in temporary closure, commonly due to insufficient levels of chlorine disinfectant (Table 5). The facilities are allowed to reopen as soon as their water chemistry meets the appropriate parameters.

**Table 5: Historic Pool and Spa Temporary Closures**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Number of Closures</b>	nd	nd	28	24	35	41	36	37	14	17

In addition to the licensed facility inspections, Environmental Public Health staff conducted 188 total inspections of child care facilities, school food service, and other group use facilities (Table 6).

**Table 6: Historic Non-Licensed Facility Inspections**

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Day Care, School Food Service, and Group Use Inspections</b>	195	202	205	204	196	184	190	197	184	188

## Illness and Outbreak Investigations

59 of the aforementioned 138 complaints were reports of illness thought to be associated with a restaurant. Because a large portion of the population associates gastroenteritis with the last meal they consumed, illnesses are often attributed to restaurants. In reality, seldom are illnesses caused by the suspect facility. In addition, viral gastroenteritis (typically norovirus) circulates throughout the world each year and causes much of the illness mistakenly attributed to restaurants. All reports of illness are investigated, foodborne illness education is provided, and the facility is notified of the complaint.

Of the 59 reports of suspect illness complaints, five of the investigations were initially identified as a suspect outbreak (broadly defined as persons from two or more non-households who develop the same clinical illness after eating at the same place). Upon further investigation, all five of the potential outbreaks revealed that the parties involved likely had other contacts or relationships with one another aside from the suspect meal (these commonly involved extended families or friends with previous contact). In such circumstances, the complainant is provided education about foodborne illness, the food service facility is notified, and food safety is discussed. Because there may be other sources of illness aside from the food service facility (including person-to-person transmission), full outbreak investigations are not conducted when the parties involved have other epidemiological relationships aside from eating at the facility.



## **FOOD HANDLER TRAINING**

EPH operates a Food Handler Training Program in order to reduce foodborne illness by promoting workers' knowledge of basic food safety principles. The program activities are conducted pursuant to the following statutes and rules:

ORS Chapter 624 Food Service Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 175 Food Handler Training.

### **Food Handler Testing**

All food handler training is offered on-line through a contract with Lane County. Food handlers can visit [orfoodhandlers.com](http://orfoodhandlers.com) to take the exam, then pay the \$10 fee and print their card. Cards are valid for 3 years and are accepted in any county in the state of Oregon.

### **Food Handler Summary**

All food service workers in Oregon are required to obtain a Food Handler Certificate by passing a 20-question Oregon Food Handler Examination with a score of 75% or greater. As of January 1, 2015, the only option for Jackson County residents to obtain a food handlers card is through our online testing site or other competing online testing sites. The steady decline of people taking in-office food handler testing and the increasing number of online testing contributed to the decision of strictly offering testing online. We will be able to reduce FTE in this program and lower overall cost with this decision. The total number of cards issued has remained fairly steady in recent years (Table 7).

**Table 7: Historic Food Handler Certificate Information**

<b>Year</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Cards Issued via Live Proctor*</b>	1,679	2,043	1,234	1,358	1,358	1,391	1,185	1305	N/A	N/A
<b>Cards Issued Online</b>	2,062	2,761	3,771	4,123	4,208	4,020	3,140	3,302	4,267	3,817
<b>Total Cards Issued</b>	3,741	4,804	5,005	5,481	5,564	5,411	4,325	4,607	4,267	3,817

\*Includes examinations given on-site, off-site by Serv Safe-certified staff, and re-issued cards.

## **DRINKING WATER PROGRAM**

The primary goal of the Drinking Water Program is to prevent illness from public drinking water sources. An intergovernmental agreement with the Oregon Health Authority Drinking Water Program delegates authority to EPH to perform services for public drinking water systems. Activities are conducted pursuant to the following statutes and rules:

ORS Chapter 448 Water and Sewage Systems; OAR 333 - Division 61 Public Water Systems.

EPH provides water system surveys, monitoring, and compliance activities for 213 public drinking water systems in Jackson County that provide clean water to approximately 21,000 citizens. There were

0.8 field FTE (1.0 total FTE) dedicated to this program in 2016. (Note: Water systems that serve more than 3,300 people are monitored by the State of Oregon Drinking Water Program staff, not Jackson County EPH staff.)

Public water systems are classified by the following definitions:

- **Community Water System:** A water system which has at least 15 service connections or which supplies drinking water to 25 or more of the same people year-round in their residences. Examples are cities, towns, subdivisions, mobile home parks, and the like.
- **Non-transient Non-community Water System:** A water system which supplies water to 25 or more different people for at least 60 days a year. Examples include schools, hospitals, and work places.
- **Transient Non-community Water System:** A water system which provides water in a place such as a restaurant or campground where people do not remain for long periods of time.
- **State Regulated Water System:** Water systems which provide water to small residential communities between four and 14 connections, or serves from ten to 24 persons a day at least 60 days a year, or is licensed by the Health Division or delegate county health department but is not a Transient Water System.

### Drinking Water Targets

The following targets were monitored monthly to ensure systems were being surveyed as needed and that *E. coli* alerts were responded to in a timely manner. *E. coli* alerts were targeted due to the potential for acute and severe illness, as opposed to chronic health issues that may result from long-term ingestion of other contaminants.

**Table 8: Annual Drinking Water Program Target Data**

<b>Targets</b>	<b>Outcome</b>
Conduct all required public water system surveys.	36 of 36 of required surveys were conducted.
Respond to <i>E. coli</i> positive water sample alerts within 24 hours of notification.	3 of 3 <i>E. coli</i> alerts were responded to within 24 hours.

### Drinking Water Summary

Water system surveys are performed every three to five years. The surveys are a comprehensive on-site review of the ability to provide drinking water to the public that is safe for human consumption, according to eight specific components: source of supply, treatment, storage, distribution, pumping, monitoring, management and operations, and operator certification.

Thirty-six drinking water systems were surveyed in 2016. In addition to the system surveys, staff responded to 141 alerts (also included in these alerts were notifications regarding water quality samples of concern even if corrective action wasn't required). When a water sample exceeds the maximum contaminant level (MCL) or other designated threshold, an alert is issued by the Oregon Drinking Water Program to EPH for follow up with the system operator. Additionally, the water system operators are often notified by the water laboratory that conducted the analysis. EPH staff provides consultation to the subject water system operator regarding appropriate corrective action, including follow-up sampling protocol, as necessary.

## **COMMUNITY HEALTH HAZARDS**

“Community health hazards” is a term used to describe the miscellaneous public health concerns that involve EPH. Activities in this area are funded by a small amount of General Fund. No FTE are formally dedicated to this program. The funding is applied on a discretionary basis depending on the need.

**Harmful Blue-green Algae Blooms:** The Oregon Health Authority’s Harmful Algae Bloom Surveillance (HABS) program is the lead agency concerning blooms. Locally, EPH is often involved in answering questions from the public and media about the blooms. When a bloom is detected, a health advisory is issued by Oregon Health Authority’s Harmful Algae Bloom Surveillance (HABS) program for the water body until tests show the bloom is below the established threshold considered safe.

There were no algae blooms identified in Jackson County water bodies in 2016. In 2012, HABS initiated a toxin-based monitoring program (TBM), which allows for advisories to be issued when toxins exceed acceptable thresholds, rather than issuing advisories based on cell counts of potentially harmful blue-green algae. The purpose of TBM is to determine actual health risks rather than potential health risks from blooms. Statewide, there were 9 advisories issued in 2016.

The HABS program was funded by a federal grant from the Centers for Disease Control (CDC). Funding for the HABS program ended as of September 30, 2013, and many program functions are no longer available. However, the Oregon Health Authority (OHA) will continue to collect and review information on harmful algae blooms and to inform the public through the issuing and lifting of advisories when water sampling data warrants.

## **DISCUSSION**

EPH staff provides specialized services to many businesses and organizations, emphasizing the importance of maintaining a highly qualified, well trained, and professional staff to maximize the effectiveness of the services to the community. Because the licensing and inspection programs are fee-based, it is imperative for EPH to maintain fees that are adequate to cover associated program costs.

While EPH receives a modest contribution of General Fund to address community health hazards, there is inadequate funding to fully address the multitude of citizen concerns regarding various local community health hazards, such as rabies prevention, blue-green algae, recreational water quality, and indoor air quality, among other environmental public health hazards.

## **REFLECTING ON 2016 AND LOOKING AHEAD**

**Licensed Inspection Program (LIP):** EPH fell short of attaining our goal of at least 95% completion rate of required inspections in LIP. This is directly attributed to a staff shortage. In 2016 we lost a tenured inspector of 7 years and another that had been with the department for 2 years. With the difficulty of recruiting experienced Environmental Health Specialists (EHS), we hired two EHS Trainees, which required several months of training. We look forward to having a trained full staff for 2017 and hope to exceed our 95% completion rate for the coming year.

We are also looking forward to having a new software inspection program coming online in February of 2017. The program is being beta tested in several counties in Oregon already, and should be ready to go live in all other counties in early 2017. The new web-based software program, which is called Health Space, is being fully funded by the Oregon Food Handler testing online site administered by Lane County.

**Wood Stove and Open Burning:** The Wood Stove and Open Burning program is addressed in a separate report, as most of the work in the program is typically conducted between October and May. However, it is worth mentioning that funding for this program via grant from the Department of Environmental Quality (DEQ) was reduced by half in recent years, then reduced again by \$2000 in 2015, which is not adequate to fund the appropriate FTE level to respond to public complaints in the field. Such cuts not only directly affect the level of service provided within the program, but also have a ripple effect throughout EPH, as staff work needs to be reallocated to other programs, or FTEs reduced.

**Organizational Camp Rules:** In 2016 a group was formed consisting of organizational camp owners, operators and governmental officials to rewrite definitions in the Oregon Revised Statutes pertaining to organizational camps. The new language has been passed in legislation. The same group is going to be adding and rewriting language in the Organizational Camp Oregon Administrative Rules in the beginning of 2017.

**Drinking Water Program Funding:** Funding for Jackson County's Drinking Water Program is currently remaining flat, while the workload has increased due to the implementation of the Ground Water Rule in 2009, and the Revised Total Coliform Rule in 2016. The Ground Water rule requires EPH to follow up with correction when significant deficiencies are identified on system surveys, while the Revised Coliform Rule requires EPH staff under certain circumstances to conduct on-site investigations of the water system. With costs increasing locally, and budgetary concerns at the federal and state level, it is unknown how the local program will be affected in the long run.

For the second year in a row, Jackson County EPH has been awarded one of two grants of \$5000 by the State of Oregon Domestic Well Safety Program (DWSP). In partnership with Patton Environmental, Jackson County EPH was able to offer education and free well testing for nitrates for people on private wells.

**Pools and Spas:** The State's Pool Program Coordinator Steve Keifer retired in 2016 after a long tenure of being the Oregon Health Authority (OHA) Pool, and Tourist Facility expert. This has created a large gap in the program which has tried to be backfilled with existing OHA staff, but the program has been unable to provide the counties with sufficient expertise needed. With this said, OHA has decided to recruit and hire someone with experience in the coming 2017 year.

**Food Handler Cards:** We have been seeing a slight decline in Food Handler card revenue since 2014. This could partly be due to strictly online testing in 2015, or to competition from other private party testing sites. Per contractual agreement, Jackson County EPH receives a portion of revenue when Jackson County residents get their cards through [www.orfoodhandlers.com](http://www.orfoodhandlers.com), which equates to \$8.00 per card. It is also noteworthy that food handler certificate fees have been capped at \$10.00 by statute for more than fifteen years. Historically, this revenue has provided funding to support our front office assistants in administering not only the food handler program, but assisting in the LIP program.

**Performance and Quality Committee:** In 2015 Jackson County Public Health developed a Performance and Quality (PQ) Committee made up of management and front line staff in all areas within JC Public Health. The committee was formed partly due to JC Public Health going through an extensive national accreditation process and the desire to create a culture of performance management. For 2016, each section within public health was tasked to come up with two performance measures they wanted to monitor. EPH decided to officially measure and monitor the percent of required licensed facility inspections completed, and percent of re-inspections performed within 14 days. Each quarter at the PQ meeting we report the results of the monitoring of the measures selected, to determine if a quality improvement project will need to be developed. At this point, we are still in the monitoring phase of the system and plan to determine if a quality improvement plan will be needed for 2017.