SANITARY SURVEY
OF
BEAVERTON, OREGON.

OSCAR SCHNEIDER
1931
## CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Water Supply</td>
<td>1</td>
</tr>
<tr>
<td>Road Map</td>
<td>2</td>
</tr>
<tr>
<td>Sewage</td>
<td>3</td>
</tr>
<tr>
<td>Garbage, Refuse, Ashes</td>
<td>6</td>
</tr>
<tr>
<td>Vital Statistics</td>
<td>6</td>
</tr>
<tr>
<td>Milk</td>
<td>7</td>
</tr>
<tr>
<td>Sanitary Nuisances</td>
<td>8</td>
</tr>
<tr>
<td>Industrial Hygiene</td>
<td>10</td>
</tr>
<tr>
<td>Housing</td>
<td>10</td>
</tr>
<tr>
<td>Communicable Diseases</td>
<td>10</td>
</tr>
<tr>
<td>Schools</td>
<td>11</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>11</td>
</tr>
<tr>
<td>General Summary</td>
<td>12</td>
</tr>
</tbody>
</table>
INTRODUCTION

Beaverton is located on the state highway, about eight miles west of Portland. It is laid out on level ground. During the early '70's, the Southern Pacific Railway was constructing a branch line from Portland into the Tualatin valley. A survey for the townsite of Beaverton was made, and the right of way and terminal sites through the community were given to the road as a bonus. Ground in that vicinity was covered by a lake seven miles in width. The lake was artificial, being formed by a beaver dam. This dam was broken, and a tract of rich black farm soil became available. The growth of the community was very slow. In 1892 the town of Beaverton was incorporated, and provided with the offices of a mayor, four councilmen, and a treasurer-recorder. The highway was built in 1919, after which the growth of the town was more rapid. The present population is about 1000. A large part of these people work in Portland and live in Beaverton. Two physicians in part time employment as health officers comprise the local health bureau.

WATER SUPPLY

Water is purchased by the town of Beaverton from the
Beaverton

Oregon-Washington Water Service Company. The source of the water supply is Sain creek. The water is collected at the creek, chlorinated, and led by a main to the reservoir near Forest Grove. An eight-inch main is used to distribute the water to the area between Hillsboro and Beaverton. There is a supply tank at Aloha to furnish additional pressure.

The water is sampled twice a week by the Company and the samples are examined for B. coli and total count at its main office in Salem. The water is sampled and analyzed by the State Board of Health every three months. A sample State report is shown (p. 4).

The district office of the Oregon-Washington Water Service Company is at Hillsboro, and the Beaverton agency is at Stipe's garage.

There are no wells in use.

SEWAGE

The town is situated low in the Tualatin valley and drainage is bad. There are no sewers. Disposal of sewage is carried out entirely by means of septic tanks, the effluent from which is drained off by pipes to the Beaver Dam ditch. The sewage is not treated.

This method of disposal, while not an ideal one, has
# REPORT ON
# BACTERIOLOGICAL EXAMINATION OF WATER

**COMPANY**: OREGON—WASHINGTON WATER SERVICE CO.  
**DISTRICT**: Hillsboro, Oregon  
**REPORTED TO**: REW - JTD - KWB  
**LABORATORY**: Salem  
**TEST NO.**: 1705, 12  
**DATE OF REPORT**: June 9, 1930

<table>
<thead>
<tr>
<th>Date Tested</th>
<th>Source of Sample</th>
<th>Bacteria per c.c. Agar 37°C</th>
<th>Examination for Colon Bacillus</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/2</td>
<td>Sain Creek</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Chlorinator</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Reservoir</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Office</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1022 Lincoln</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

**No. of Portions Examined**  
10c.c. 1c.c. 0.1c.c. 10c.c. 1c.c. 0.1c.c. 10c.c. 1c.c. 0.1c.c.  
**Presumptive in Lactose Broth**  
2 0 0 2 0 0 0 0 0  
**Confirmed on E.M.B. Agar**  
5 0 0 5 0 0 0 0 0  
**No. of B. Coli PER 100 c.c.**  
5 X 5 X 5 X 5 X 5 X  
**Sanitary Quality of Sample**  
Good Fair Poor

---

The laboratory examination determines the presence or absence of pollution at the time of sampling. A standard of purity promulgated by the United States Public Health Service specifies that the number of organisms of the Bacillus Colon group present in drinking water shall not exceed 2 per 100cc. Water failing to conform to this specification must be considered unsafe unless a sanitary survey shows definite reasons why the excess may be disregarded.  

**Remarks:**

(page 4)

By ____________________________  
ANALYST
Reservoir near Forest Grove

Supply tank at Aloha
been found to be quite efficient. The greatest inconvenience to the inhabitants is that of the bad odor which is encountered in the vicinity of the drain pipes only. The sewage has in no way been found responsible for any disease in this or in other communities.

**GARBAGE, REFUSE, ASHES**

Garbage and other refuse is not collected. The disposal of this sort of waste is left to the individual inhabitants, who do so usually by burning or by dumping. Cans are collected once a year and dumped. As regards this system of disposal of garbage, it can be said, of course, that there is room for improvement. However, the health officer has had no complaint made to him as to garbage becoming a nuisance. The population of the town is small, but in the writer's opinion, it is not too small for the activity of one garbage collector.

**VITAL STATISTICS**

Vital statistics for the town of Beaverton itself are not readily available. However, those for Washington County, in which the town is located, have been compiled from the biennial reports of the State Board of Health.
Beaverton

for the years stated. The figures given for the various communicable diseases are morbidity rates per 100,000.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Deaths</th>
<th>Infant Mortality</th>
<th>Typhoid</th>
<th>Tuberculosis</th>
<th>Measles</th>
<th>Scarlet Fever</th>
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<tbody>
<tr>
<td></td>
<td>29,100</td>
<td>920</td>
<td>48.9</td>
<td>6.85</td>
<td>47.8</td>
<td>6.85</td>
<td>185</td>
</tr>
<tr>
<td>1925</td>
<td>29,600</td>
<td>815</td>
<td>41.1</td>
<td>10.1</td>
<td>33.8</td>
<td>365</td>
<td>220</td>
</tr>
<tr>
<td>1926</td>
<td>30,100</td>
<td>905</td>
<td>55.1</td>
<td>16.6</td>
<td>36.6</td>
<td>163</td>
<td>220</td>
</tr>
<tr>
<td>1927</td>
<td>29,509</td>
<td>967</td>
<td>32.4</td>
<td>17.0</td>
<td>47.5</td>
<td>81.5</td>
<td>85.0</td>
</tr>
<tr>
<td>1928</td>
<td>29,877</td>
<td>968</td>
<td>37.0</td>
<td>10.0</td>
<td>66.7</td>
<td>524</td>
<td>97.0</td>
</tr>
</tbody>
</table>

* Per 100,000

# Rate per 1,000 live births.

The blanks used by the department of health for deaths, births, and notifiable diseases are those furnished by the State Board of Health. Weekly report is made by the health office to the State Board of Health of all cases of communicable disease.

MILK

There are no dairies in Beaverton, but there are a

number of grocers who sell milk which
number of grocers who sell milk which is obtained from dairies at Aloha. These dairies are inspected at regular intervals by the State Dairy Inspector for this district.

The amount of milk pasteurized could not be ascertained. All the milk produced by the dairy which the writer visited was pasteurized. The sanitary conditions at this dairy appeared to be quite good. The buildings, while not of modern concrete construction, were nevertheless in an excellent state of repair. The barn was light and airy, and the stalls were clean. The pasteurization plant was also in good condition.

A large part of the milk produced in Aloha and near by farms and communities is also sold in Portland. The establishments of milk dealers in Beaverton are inspected by the health officer, and have been generally found satisfactory.

SANITARY NUISANCES.

The only sources of disagreeable odors about the town are the drain pipes which have been mentioned above. There is a good deal of road dust in the summer. The main highway is of asphalt and concrete construction, and is not a source of dust, nor are the main streets dusty. There are numerous dirt side roads, however. These are sprayed with oil during the summer to
Beaverton

Scenes from Dairy Farm visited by writer.
eliminate dust as much as possible.

The vacant lots about the town seemed clean and free from refuse heaps. Mosquitoes are plentiful during the warm months, but not more so than in other communities near Portland. There are no stables. There is no smoke, and there are no sources of noise.

INDUSTRIAL HYGIENE

Beaverton is essentially a residential and farming community. There are no factories, and no industries.

HOUSING

There are no tenement houses. There is one hotel, of semi-modern brick construction, steam-heated, and so small as to make ventilation a minor problem. There are no large buildings.

COMMUNICABLE DISEASES

All blanks used are those provided by the State Board of Health. The diseases reportable are the same as those prescribed by the state. A weekly report of communicable diseases is made to the Secretary of the State Board in Portland.

There are no hospitals. The proximity of Beaverton to Portland makes adequate hospitalization and treatment
of patients a relatively simple matter. The periods of quarantine for the various communicable diseases are as fixed by the state regulations. Venereal diseases are reportable.

SCHOOLS

The ventilation and lighting of the schools is modern, and there is adequate playground space. Pupils are vaccinated and offered diphtheria toxin-antitoxin every year. About 50% of the pupils are inoculated with the toxin-antitoxin. Children with measles, smallpox, scarlet fever, diphtheria, chicken-pox, whooping cough, and mumps are excluded from school.

MISCELLANEOUS

There are no public markets in Beaverton. Grocery stores and soda-fountains, as well as barber shops are regularly inspected by the health officer. There are no slaughter-houses or cold storage plants. The one hotel has no kitchen.

The local health officer makes use of the diagnostic laboratories in Portland when occasion arises. There are no social service agencies, agencies of the
Beaverton

Red Cross, health centers, or clinics.

GENERAL SUMMARY

Beaverton is a residential and farming town with a population of about 1000. Two physicians on part-time duty comprise the local board of health. The town has an excellent water supply, regularly inspected by its proprietors as well as by the state authorities. Sewage is disposed of by means of septic tanks entirely. The sewage system has proved very satisfactory, its only fault being the presence of unpleasant odors in the vicinity of the drain pipes. Garbage is not collected, but cans are collected once a year. Accurate records of vital statistics are reported weekly to the State Board of Health. Beaverton has an excellent milk supply, though there are no dairies in the city itself.

The bad odor mentioned above, and a certain amount of dust and mosquitoes in the summer months are the only nuisances. There are no industries, factories, or tenements, nor are there any large buildings. The proximity to Portland makes a hospital, clinics, welfare bureaus, and social service agencies unnecessary. The schools are modern in construction. The pupils are vaccinated, and offered toxin-antitoxin inoculations. Those with communicable diseases are excluded from classes.

The principal criticisms to be made of sanitary conditions in Beaverton are:
Beaverton

(1) The bad odors arising in the vicinity of drain pipes of septic tanks.
(2) The dust in the dry season.
(3) The lack of a garbage collecting system.

The following changes should be made:

(1) The employment of a garbage collector, and the construction of an incinerator.
(2) Repair of the effluent drain pipes.
(3) More adequate spraying of the dusty roads.